THE

PALESTINE EXPLORATION FUND

On and after July 30th, the Offices of the Society will be at 1, Adam Street, Adelphi.

NOTES AND NEWS.

THE first instalment of the "Survey of Western Palestine" in the shape of the Great Maps in 26 sheets has now been delivered to all subscribers of the Special Edition. The first Volume of the Memoirs is far advanced and will be issued in the summer. The succeeding volumes will follow at short intervals.

A few copies of the map have been issued to subscribers. Those who have put down their names may expect their copies in the course of the month. They will be sent out in order of application, and payment should be made in advance.

The Committee are anxious that as many of their subscribers as possible should have the opportunity of seeing the Great Map. They have, therefore, had the sheets put together so as to form a map about 18 feet long, on rollers, which can be sent to any Honorary Local Secretary to the Fund, for exhibition to his subscribers, or to any subscriber to the Fund who may wish to show it to his friends and will pay the expenses of carriage. The map has already been shown at Edinburgh, Manchester, Leeds, Stroud, Hereford, Ledbury, and one or two other places.

The "special papers" promised for the Memoirs will probably consist of three volumes containing (1) an account of research and discovery in Jerusalem by Colonel Warren, R.E., including his own excavations and all subsequent work in the city, illustrated by plans. (2) Professor E. H. Palmer's Journey through the Desert of the Tîh. (3) Papers on various prints, from the *Quarterly Statement* (1869–1880), and others specially written for the work by the Rev. Canon Tristram, Colonel Wilson, Major Anderson, Mr. Glaisher, M. Clermont Ganneau and others. (4) The name lists, which will include not only all those obtained by the officers of the survey, but also those not in that list, given in Sepp and elsewhere, and found by Rosen, Guérin, Ganneau, and other travellers.

Colonel Warren has joined Major Anderson as Editor of the Maps; Professor Hayter Lewis has undertaken the supervision of the plans and architectural drawings; Mr. Walter Besant has been associated with Professor Palmer as Editor of the Memoirs. The Memoirs and maps will be published when subscribers of the Special Edition have had their copies, at TWENTY GUINEAS inclusive; a limited number only will be printed. A Subscription List is lying at the office of the Fund.

The publication of the Large Map has been placed in the hands of Mr. Edward Stanford, 55, Charing Cross, who issues it at the price of Three Guineas. Subscribers to the Fund who wish to have it at the reduced price of Two Guineas, should apply to the Secretary of the Society at the new office, 1, Adam Street, Adelphi.

It has been resolved for the convenience and help of students to issue at the same time as the reduced Map of Modern Western Palestine, two Biblical Maps of the same country in six sheets on the same scale, viz., $\frac{3}{8}$th of an inch to a mile, (see p. 131). There will thus be three maps:—

(1) Western Palestine, illustrating the Geography of the Old Testament within the limits of the Map.

(2) Western Palestine, illustrating the Geography of the New Testament within the limits of the Map.

(3) Modern Western Palestine.

The preparation of these maps has been offered to, and accepted by, Mr. Trelawny Saunders.

No part of Eastern Palestine will be engraved for these maps. It should be mentioned, to save disappointment, that the sheets sent over by the American Society are not offered as a survey, but as a reconnaissance. They are a valuable addition to our knowledge of that region, but the survey has yet to be undertaken.

The price of the reduced maps to subscribers will be as low as possible; until they are ready, however, no decision can be arrived at.

A meeting of General Committee was held on Tuesday, June 15th, in accordance with clause 22 of the Articles of Association. The Chair was taken by Mr. James Glaisher, but as the business of the meeting had all been transacted at the extraordinary meeting of March 16th, 1880, the proceedings were merely formal.

In order to meet a desire expressed by many correspondents, the Committee have in preparation a pamphlet on the gains to the knowledge and better understanding of the Bible resulting from the survey of Western Palestine. A copy will be sent to every subscriber to the Large Map who wishes to have it.

The Committee have also resolved upon issuing a general index to the papers

and subjects treated of in the *Quarterly Statement* from its commencement to October, 1880. The work has been undertaken by Mr. W. S. W. Vaux, F.R.S.

Colonel Warren has in the press a work entitled "Temple or Tomb?" He maintains in this book that his explorations at Jerusalem tended to confirm the authenticity of the traditional sites of the Holy Sepulchre and Temple of the Jews. He shows that the Zion to which the ark of the Lord was brought by King David was a totally distinct hill from Moriah, on which the Temple of Solomon was built, and will point out that the confusion existing in the minds of many on the subject arises from the fact that, of the principal poetical works, the psalms referring specially to Zion were composed by David during the period when Zion was the Holy Hill, while the psalms written after the building of the Temple only refer to Zion in parallelisms. He also shows that of three hills on which Jerusalem is built, there is a general concurrence between the Bible, Josephus, and Maccabees that Moriah, the Temple mount, is that to the east; that to the south-west is the upper city of Josephus, and that to the north-west is the Akra, formerly the city of David (Zion), which was cut down by the Maccabees to prevent it dominating the Temple. He is of opinion that the west, south, and east walls of the Temple, together with the northern edge of the dome of the rock platform, indicate the limits of the Temple courts of Herod; the large marginal drafted stones of which formed the actual walls that existed or were built in his day. He maintains that the threshing floor of Araunah the Jebusite, was on the top of the hill of Moriah, and that the position of the Temple was in the main, identical with that indicated by the common tradition of Jews, Christians and Mohammedans.

Mr. Laurence Oliphant, who has recently returned from a journey in Eastern Palestine, will publish in the Autumn a work entitled "The Land of Gilead." His expedition, which was undertaken in the interests of the project which we described in the last number of the *Quarterly Statement*, led him to many places never before described, even if they have been visited by European travellers, and was rich in geographical and archæological results.

When the Memoirs are completed it is proposed by Mr. Walter Besant to prepare a translation of the early travels in Palestine. This will include, besides those accounts published by Tobler, the description of Jerusalem on the arrival of the Crusaders, which has never hitherto been translated from the Norman French, and a chapter on the Arabic historians, which will be contributed by Professor E. H. Palmer. Colonel Warren has promised to add a running commentary and short notes to the text. This book will probably be published next year by subscription.

We promised to give Professor Palmer's translations of the Arabic inscriptions in the Cubbet es Sakhrah in this number of the *Quarterly Statement*. He has, however, been unavoidably prevented from completing them.

Mr. Greville Chester's report of his journey through the cities of the Delta and the shores of the "Lacus Serbonicus" will be found in this number. He points out serious errors in the revised maps and differs altogether from the theory of Brugsch Bey.

A cheap edition of "Tent Work in Palestine" will be published in the autumn. Its price will probably be 7*s.* 6*d.* A few copies still remain of the Library Edition.

The income of the Fund from all sources, from March 20th, 1880, to June 28th, 1880, was £1,048 14*s.* 8*d.* The general expenditure on rent, parcels, postage, printing of Quarterly Statement, of Memoirs, &c., during the same period has been £528 1*s.* The amount in hand at the Committee meeting of June 28th was £1,432 2*s.* 11*d.*

It is suggested to subscribers that the safest and the most convenient manner of paying subscriptions is through a bank. Many subscribers have adopted this method, which removes the danger of loss or miscarriage, and renders unnecessary the acknowledgment by official receipt and letter.

Subscribers who do not receive the *Quarterly Statement* regularly, are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

The publications of the Society now in print are:—

1. The Recovery of Jerusalem. Third Thousand. 16*s.* to Subscribers.
2. Our Work in Palestine. Ninth Thousand. 3*s.* 6*d.*
3. Tent Work in Palestine. Second Thousand. 17*s.* 6*d.* to Subscribers.
4. The *Quarterly Statement.*

The second of these contains a popular account of the excavations in Jerusalem, with the reasons and aims of the work.

A few copies still remain of Lieutenant Kitchener's Guinea book of Biblical Photographs. It contains twelve views, with a short account of each. The views are mounted on tinted boards, and handsomely bound.

Cases for binding the *Quarterly Statement* can be obtained of the Society's publishers, Messrs. R. Bentley and Son, at eighteenpence each. They are in green or brown cloth with the stamp of the Society.

The following are at present Representatives and Lecturers of the Society, in addition to the local Honorary Secretaries:—

Archdeaconry of Hereford: Rev. J. S. Stooke-Vaughan, Wellington Heath, Vicarage, Ledbury.

City and neighbourhood of Manchester: Rev. W. F. Birch, St. Saviour's Rectory.

Lancashire: Rev. John Bone, St. Thomas's Vicarage, Lancaster.

London; Rev. Henry Geary, 16, Somerset Street, Portman Square.
Norwich: Rev. W. F. Creeny.
Peterborough: Rev. A. J. Foster, Farndish Rectory, Wellingborough.
Worcester: Rev. F. W. Holland, Evesham (Member of General and Executive Committee, and one of the Hon. Secretaries to the Fund).
Diocese of Ripon: Rev. T. C. Henley, Kirkby Malham Vicarage.
North Wales: Rev. John Jones, Pwllheli, North Wales.
Yorkshire, Durham, and the North: Rev. James King, St. Mary's Vicarage, Berwick. Mr. King has recently returned from the Holy Land; communications for lectures, &c., can be sent to the Office at Charing Cross.

While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that these rest solely upon the credit of the respective authors, and that by publishing them in the *Quarterly Statement* the Committee neither sanction nor adopt them.

Annual subscribers are earnestly requested to forward their subscriptions for the current year when due, at their *earliest convenience*, and without waiting for application.

The Committee are always glad to receive old numbers of the *Quarterly Statement*, especially those which have been advertised as out of print.

THE REDUCED MAPS.

The following correspondence more fully explains the statement made above as to the reduced maps:—

To the Editors of "The Leeds Mercury."

"GENTLEMEN,—Having recently written to the Secretary of the Palestine Exploration Fund relative to the exhibition of the great map on Thursday last, and mentioned the criticism of several subscribers that so few of the biblical names of places were introduced—many even of important towns being marked only by their modern names—I have received the accompanying letter in reply, which Mr. Besant asks me to publish, hoping that the subscribers will be satisfied with the action of the Committee in meeting their objections half-way.—I am, &c.,

"ED. ATKINSON.

"Leeds, 10th June, 1880."

"Palestine Exploration Fund,
"11 and 12, Charing Cross, June 7th, 1880.

DEAR SIR,—I have to acknowledge the receipt of your letter of this morning. The Committee have already considered the questions raised by you in this communication as to the scriptural names, and are fully awake to the importance of making the results of the survey more widely useful to biblical students than is possible with the great map alone. With this object in view they have resolved upon issuing, as soon as they can be prepared, three maps of Western Palestine,

reduced from the large map which you have seen, to three-eighths the original size. The first of these will contain as many of the modern names now in the large map as can be found room for, and will form a trustworthy map for the traveller and geographer of modern Palestine. The second will be a map of the country in the time of Our Lord, forming an accurate map (so far as the identifications are accepted) to illustrate the New Testament and Josephus. The third will be a map of the country in the time of the Kings, illustrating the whole of the Old Testament narrative so far as Western Palestine is concerned. In addition to this, we have now in hand, and shall shortly publish, a pamphlet on the principal gains to Biblical knowledge from the survey. I have to add that the price of these reduced maps to subscribers will be fixed at the actual cost-price of their production. They will all be ready, I think, by February next. It is a great satisfaction to the Committee that their subscribers in Leeds have had a chance of seeing how their money has been expended, and of realising that they have contributed to the completion of the most important work ever undertaken in illustration of the Bible. I have only now to convey to you the thanks of the Committee for your own exertions and trouble in the cause.

"I remain, dear SIR, faithfully yours,

"WALTER BESANT, M.A., Secretary.

"Edward Atkinson, Esq., F.R.C.S."

A JOURNEY TO THE BIBLICAL SITES IN LOWER EGYPT, ETC.

By Greville J. Chester, B.A., Member of the Royal Archæological Institute.

The work of the Palestine Exploration Fund could scarcely be deemed complete if Egypt were left out of the scope of its investigations. In the very first Book of the *Old* Testament, we read of Abram going during a famine to sojourn in the rich and fertile land of Egypt, and of his deceitful dealings with the king of that country, and on the very threshold of the *New* Testament, we are told of the flight of the Blessed Virgin Mary and St. Joseph with the Holy Child to the same place of refuge, and how it was that "out of Egypt God called his Son." In addition to this, much of the Old Testament relates to Egyptian transactions, and there is, in point of fact, scarcely a better or more striking commentary upon the inspired Prophets than the present state and aspect of the ancient Biblical cities of Lower Egypt.

So far as the writer can discover, there are no Arabic or Christian traditions in Egypt, relating to the visit of the Patriarch Abram, and Brugsch's identification of a place called in the monuments *T-en Moshè*, the Island or Riverbank of Moses, with the name of the great deliverer and law-giver, must at the best be considered very doubtful. ("Hist. of Egypt," ii, 112). With respect, however, to the "Flight into Egypt," and the sojourn of the Infant Christ in that ancient land, four traditions prevail to this day amongst the Copts, who are the representatives of the ancient Egyptians, and the inheritors to some extent of the traditions, as they are the actual possessors of the property of the ancient orthodox Church of Egypt.

The first of these traditions relates to the Crypt Church of Sitt Miriam, the Lady Mary, under the fine and curious Church of Abou-Sirgeh in the ancient Roman fortress of Kas'r or Dayr-esh-Shemmah at Mis'r Ateekeh, (Old Cairo). The church in question is a small subterraneous building of very early type, perhaps as early as the sixth or seventh century. It has three aisles, each side aisle being separated from the nave by two pillars taken from some earlier Greek or Roman structure. In the eastern, northern, and southern walls respectively, there is a niche with a slab sculptured with a cross at the bottom of each, and according to Coptic tradition, the Virgin and St. Joseph reposed in the side ones, and the Divine Child in that in the centre. His Holiness Kyrillos, the present Patriarch of the Copts, whom I questioned on the subject, declared that this tradition is at least as old as the crypt to which it relates.

The three other traditions are connected with the fountain and tree at Matareeyeh a few miles from Cairo in the immediate neighbourhood of

the ruins of Heliopolis (On). In a garden a little to the right of the road, presented with characteristic bad taste by the ex-Khedîv to the Empress Eugénie, and now profaned by a French café, is a venerable *Gemaseh*, or sycomore-fig tree, under whose branches the Holy Family are traditionally reported to have rested at the time of the Flight. Another tradition relates that the Blessed Virgin concealed the Holy Child in a hole in the trunk, and that a spider spun its web over the aperture so as to conceal Him from His pursuers.* The present tree is said to be the successor of one which died some two centuries ago, but there is nothing in the appearance of the tree itself to militate against the idea that it is of a much greater antiquity, and the extreme longevity of the sycomore-fig is well known. Hard by is a fountain with a sakieh, fed probably by percolation from the Nile, but said to have been brackish until the Virgin bathed therein, when it became sweet. To these stories, I may add that it was interesting to one who in childhood in his native Norfolk had heard the legend which connects the white spots on the leaf of the "Blessed Thistle," with the milk of the Blessed Virgin, to find the road in the neighbourhood of Matareeyeh, bordered on both sides with luxuriant tufts of that beautiful plant.

Thus much being said about the local traditions, the writer would remark that the following notes are the result of a journey undertaken in the early part of the present year at the request of the Committee of the Palestine Exploration Fund, to visit the principal Biblical cities of Lower Egypt, and the places on the route of the Israelites at the Exodus, as proposed many years ago by Richter and Schleiden, and advocated afresh by Brugsch Bey, who, it must be confessed, has made but slight acknowledgment of the labour of his predecessors. The writer, in what he has to relate, has himself no particular theory to advocate with regard to the Exodus; all theories at present promulgated, presenting in his opinion, almost insuperable difficulties. His sole object has been to search after truth, and to relate as plainly as possible what he saw, in the hope that others may be aided in drawing safe conclusions from the facts stated and the observations made. He has not shrunk, however, from noting in passing anything which in his opinion makes for or against a theory, which most people will allow to be a brilliant one, and which, at all events *primâ facie*, has much to commend it.

Upon one point, indeed, Herr Brugsch seems to have laid too little stress, although it tells in his own favour. It surely seems unlikely in the extreme that a multitude of people whose main object was to get out of the country as fast as possible—to go out into the wilderness or desert to sacrifice unto the Lord—a multitude laden, moreover, with rich plunder, and encumbered with flocks and herds—it surely seems unlikely in the extreme that they should, in the first instance, have gone utterly out of the way in the direction of Suez, and that through a hostile country, and through the very midst of their former enslavers, when they

* Bœdeker's Handbook.

might have gone out straight and by a short cut into the desert by the well-known "royal" route into Phœnicia.

It seems probable indeed that the term "Red Sea" adopted by the Authorised Version from the LXX, has put investigators on a wrong scent, and has even led a writer of such justly high renown as Professor G. Ebers to attempt to identity the Baal-Zephon of Scripture with Gebel Attâka, many miles below Suez. The name Baal-Zephon is clearly of Phœnician or Semitic origin, and to be looked for on the road to Syria, and not in a place so utterly remote from Phœnician influences as the desert Egyptian coast of the Red Sea. If one were asked where one could naturally expect to find a Baal-Zephon, one would instantly point to some spot in the direct route from Egypt into Syria, and it is in that very direction that Herr Brugsch finds indicated in the Papyri a Baal-Zapouni, which he seeks to identify with Mount Casius. Why I am compelled to question the correctness of this view will appear hereafter.

In the ensuing notes, I propose to speak separately of the principal sites visited in Lower Egypt, and then to give a more detailed account of my journey on the supposed route of the Hebrews at the time of the Exodus.

HELIOPOLIS.

Some 9 miles from Cairo, and a short distance beyond Matareeyeh and the "Virgin's Tree" are the remains of Heliopolis, the City of the Sun-god Rà, called *An* by the ancient Egyptians, and *On* and *Beth-Shemesh*, the abode, that is, of the Sun, in Holy Scripture. In the LXX and Vulgate, it is called by its Greek equivalent "Ἡλιουπολις;" and in the LXX it is added to Pithom and Ramses, as being one of the "Strong," or rather "Temple" cities which were built by the oppressed Hebrews for the Egyptians. On was a priestly city and a place of learning, and its reputation was such that Plato is said to have studied there under the priests for no less a time than thirteen years. Joseph is believed also to have studied there, and it is expressly stated in the Book of Genesis (xli, 45), that the Pharaoh gave him to wife, Asenath, the daughter of a priest of On, named Potiphera, one, *i.e.*, dedicated to the Sun-god Rà. Although it never attained to the rank of a capital, Heliopolis was always a city of great celebrity. Here the worship of the Bull Mnevis, sacred to Rà, was established as early as the remote period of the second dynasty, under King Kakaoo, *circa* B.C. 4100–4751. The mystical bird called the *Bennu*, or Phœnix, was likewise venerated here, and speaking generally, On may be described as having been the centre of the worship of the deities connected with the sun. King Amenemhat I, the first King of the 12th dynasty, is said to have *restored* the shrine of Tum, the Evening-Sun-god, and to have laid the foundations of the great Temple of the Sun, in front of which amongst others was erected the noble obelisk, which still exists,

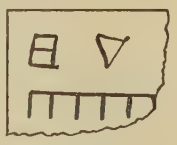
by his son Osirtasen I. The title "Lord of On" was added to the other pompous titles of the Egyptian kings, and the vast wealth of its temple, and the immense number of its priests, are recorded in several papyri. Now almost all the ancient glory of Heliopolis has been swept away by the hand of time, the greed of successive tyrants, and its proximity to Cairo, for the erection of which city its ruins must have formed a convenient quarry. The remains, however, are still considerable. The obelisk of Osirtasen, which still exists, is the oldest in Egypt of its size, which is no less than 66 feet 6 inches above the level of the pavement from whence it sprung. Like other obelisks, it is a monolith, and made of the red granite of Assouan, the ancient Syene, at the first cataract. It is now buried to a depth of between 2 and 3 feet by the deposits of the Nile. This obelisk, which was doubtless one of a pair which stood in front of the great temple of the Sun, now stands amidst a few trees near the centre of the vast enclosure which anciently surrounded the temple. It bears the same hieroglyphic inscription cut in each of its four sides, and includes the cartouch and name of its founder, Osirtasen I. Unfortunately, the mason bees have nearly obliterated the inscriptions on the north and south sides of the monument by covering them with their cells of hardened clay. On the east and west sides, however, the inscriptions appear of a brown colour on a red ground, the cells in those positions only filling up the deeply-incised hieroglyphs to the level of the red granite surface of the obelisk. The sides of the vast oblong space in which the temple was situated are still marked by mounds, or walls of crude brick, those to the east, south, and west, being of narrow dimensions. Those to the north, however, have their continuation in the ruins of the ancient town which, formed of crude brick houses, must have been of considerable extent. Here are frequently found scarabæi, sacred images and emblems in porcelain, and other antiquities. The city is separated from the neighbouring desert by a narrow strip of inundated and cultivated soil. The Pelusaic branch of the Nile, which formerly passed close to the city, is now entirely silted up.

TEL-EL-YAHOUDEH.

Some 20 miles from Cairo, near the Moslem village of Shibeen-el-Kanater, rise the imposing remains of Tel-el-Yahoudeh, "the Mound of the Jew," which, although not connected with any Biblical site, are yet deserving of notice in this place, as being conjecturally the ruins of Onion or Onia. It should be mentioned, however, that Onion is placed by Sir G. Wilkinson at Belbeis, and by Mr. R. S. Poole at Leontopolis. Anyhow, the name of the place indicates some intimate connection with the Jewish people, which cannot be said of either of the other sites.

Onias, son of the High Priest Onias III. escaped in early youth from Syria, and found refuge amongst the party of the Mizraimites in Egypt,

at that time ruled by Ptolemy Philometor, B.C. 222. In order to bring about the union of the Hellenistic Jews, Onias, encouraged by a prophecy of Isaiah, that a time should come when there should be "an Altar to the Lord in the midst of the land of Egypt," (Isaiah xix, 19), applied to the king for permission to build a new temple on the site of a deserted shrine, or fortress. Ptolemy, although marvelling that a Jew should desire to erect a temple to the God of Israel in a place abounding in idolatrous emblems, nevertheless granted his request, and Onias erected the temple and town called Onion after himself. Josephus describes the temple, so erected, as resembling a tower, and states that it was surrounded with a wall of burnt brick, with gates of stone. In it was a golden lamp, suspended by a golden chain. No certain vestiges of this temple can now be discovered, but there are vague rumours of the finding of Hebrew inscriptions, now lost; and Professor Sayce informs me that he this spring found a fragment of stone lying on the inner slope of the mound on the eastern side, bearing two ancient Hebrew letters. This stone seemed to have been originally covered with a thin coating of stucco. The two old Hebrew characters would represent the square Hebrew ח ע. Be that as it may, the extent of the ruins shows that Tel-el-Yahoudeh marks the site of an ancient Egyptian town of considerable importance, and one can scarcely doubt that it was a royal residence. The town was upwards of half-a-mile in length, by a quarter of a mile in breadth, and was defended by a ditch and wall, which last rises on the eastern side into a lofty fortress, built, like the walls, of crude brick, and containing a curious windowless shaft or dungeon, ten feet square. Beyond this, still farther to the east, extends a lower, but equally long, part of the Tel, chiefly occupied by streets of houses of crude brick, some of which still bear the traces of whitewash. This portion of the town has evidently been burnt, and is apparently chiefly of the Roman period. On the western side of the Tel might be seen a few years since some portions of what I conjecture to have been a royal kiosk or country residence of Rameses II. A monolithic bath of limestone, and a few blocks of alabaster, are almost the only remains now existing. Formerly there was visible a floor made of blocks of polished alabaster, on which were set pedestals of granite and alabaster, bearing the cartouches of Rameses II, and others of a later period, inlaid with circular roundels of various sizes of brown and yellowish porcelain, of which each one bears a six-pointed flower or rosette. Amongst the surrounding *débris* were formerly to be found portions of splendid porcelain friezes, and wall decorations of various colours and designs, some of which are inlaid with glass. Other friezes were of alabaster, some inlaid, and some carved in relief. Amongst the latter were several heads of Rameses. The porcelain friezes represented rows of figures of the Phœnix (*Bennu*), serpents, lotus buds, and several conventional designs. Others had inlaid figures of Semitic and Negro captives, and other figures coloured yellow, and apparently representing people of some European race. On one occasion I



dug out a perfect figure of an Asiatic captive with my own hands, and it may now be seen in the British Museum. Besides these, I brought away tiles with the prenomen and name of Rameses inlaid in glass. At different visits to Tel-el-Yahoudeh, I have seen or obtained portions of statues and other objects bearing the names of Apopi or Apappus, an Hyksos King, Seti, or Menepthah I, the presumed Pharaoh of the Exodus, Rameses II and III, and Sheshonk I, the Shishak of the Bible. The statues have unfortunately been all broken up by the fellaheen as soon as they were discovered, from fear of the infamously cruel system in vogue in Egypt, which exposes the accidental discoverer of antiquities to flogging and imprisonment, and to the confiscation of the objects found.

TEL-BASTA.

Fifty miles from Cairo, in a rich and fertile country, and close to the flourishing modern town of Zagazig, or Zakazîk, rise the extensive mounds and ruins of Pibast, the *Pibeseth* of Ezekiel xxx, 17, and the Bubastis of the Greeks. The ruins at present cover a very large space of ground. The ancient city, which was visited and described by Herodotus,* was celebrated for its beautiful temple, dedicated to the cat or lioness-headed goddess, Pasht, the Egyptian Aphrodite or Venus. This goddess is represented with the head of a lioness or cat, and her sacred emblem was the cat. Numbers of bronze cats, some of which have crystal eyes, have been procured from Tel-Basta, and sent to England by Mr. Clark, of the Telegraph Department of the Egyptian Government, who perhaps knows more of the ruins of the Tel than any one else. Only a few granite blocks now remain of the splendid temple described by Herodotus, but Mr. Clark has discovered some small fragments of another, probably that mentioned by the Greek historian as dedicated to Hermes. Around the relics of the great temple, rise the crude brick mounds of the ancient walls of enclosure, which in one place assume the form of a fortress. The houses of the city, which are being continually excavated by the fellaheen for the dust, with which they manure their land, are in an unusually good state of preservation. From the top of the mounds the desert is plainly visible, although at a considerable distance. When wandering amidst the shapeless mounds of Pibeseth, and finding ever and anon pieces of skulls and other human bones protruding from the soil, it was impossible to help remembering that Ezekiel of old time had prophesied that "the young men of Aven and Pibeseth shall fall by the sword, and these cities shall go into captivity."

* "Herod." ii, 137.

TEL-FAKÛS.

Tel-Fakus, the Kûs of the Copts, and Phacusa of the Greeks, which, with great probability, has been identified with the Goshen (Gosem or Kosem), of the Bible, is about 4½ hours distant from Tel-Basta. It was itself a city of considerable size, and the capital, probably, of a district bearing the same name, which, as we read in Genesis xlvi and xlvii, was granted to the immigrant family of Joseph, as an habitation for them and for their children, for their flocks and for their herds. The rich and fertile appearance of the surrounding district, the "Land of Goshen," quite bears out the scriptural statement that it was "the best of the land," and one has no cause to wonder that the Israelites should have "grown and multiplied" therein "exceedingly." The Tel at present is of considerable extent, but the mounds have been mostly carried away by the country folks who use the disintegrated bricks of Nile mud, and the dust and rubbish as a top-dressing for their land. The innumerable potsherds which are left, cause the mounds to be of a red colour. Part of the ancient site is occupied by palm-trees, amidst which, from heaps of red pottery, tower up large fragments of the crude brick houses. A few blocks bearing the name of Rameses II, are said to have been found in the Tel. Apart from the beauty of the site, beside a small lake, and amidst innumerable palm-trees, Tel-Fakûs is an uninteresting place. I was awakened several times during the night by the melancholy cries of numbers of jackals, which were answered by the bay of the dogs, which had voluntarily constituted themselves the guards of my tent.

There are two routes from Tel Fakûs to Sân. The nearest of these leads through swamps, which at the time of my visit were impassable on account of the amount of water on the track. The other conducts the traveller by way of Salaheyeh. This road passes first through a country abounding in splendid palm-trees, intersected by small pools of water, and then enters an altogether treeless district of marshes, intersected by reed-encumbered lakes, and with the desert in full view to the right of the track. The scanty inhabitants dwell in huts constructed of reeds, and in appearance, and to a certain extent in language, they differ from the other inhabitants of Egypt, being doubtless of Semitic origin. After passing a large lake covered with innumerable wild-fowl, Salaheyeh is reached at the distance of about four and a-half hours from Tel Fakûs. From its position on the caravan route to Syria, Salaheyeh is an important place, and its Sheik has a widely extended authority. At the time of my visit, the Sheik, who has the title of Bey, was absent, but I was received with much kindness and gentlemanlike courtesy by his son Edroos, a handsome youth of pleasing manners, and by his brother, the Sheik Imâm. The houses of Salaheyeh, instead of being crowded together, are scattered about beside a small birket or lake, and amongst the magnificent groves of palms, of which there are no less than 54,000 in Salaheyeh alone.

SÂN.

The journey from Salaheyeh to Sân occupies little more than five hours. The path, after leaving the palm-groves, crosses a strip of desert, when another grove of palm-trees is reached, and soon afterwards a ferry-boat takes the traveller across an ancient canal, which represents the ancient Pelusaic branch of the Nile, and runs down to Tel Dephneh, and so out into the lakes. The place now reached is called "Gezeereh," *i.e.*, the Island, and is an elevated tract of sand surrounded by a zone of cultivated land, and tenanted by a tribe of immigrant Mogrebi or Moorish Arabs. Seeing some splendid greyhounds near the Sheik's tent, I accosted an ancient, and requested permission to examine them. I was thereupon invited to alight and to partake of coffee in a rude hut formed of palms, supports, and reeds, and open at one end. Here I found four superb peregrine falcons, jessed and hooded, with crimson plumes on their hoods. They are used, in conjunction with the greyhounds, in the chase of gazelles, which abound in the adjacent desert. Leaving Gezeereh, and on the edge of the waste, I diverged from the tract to the left to examine some huge granite fragments which I saw lying upon the sand. They proved to be the half of a kind of bath, and portions of what seems to have been a Colossus. Around are strewn numerous fragments of pottery and glass. I now entered "the field," or "plain of Zoan," the great and hideous waste which extends to the foot of the mounds of Sân. The soil of brown, and sometimes blackish, pulverized mud, with an efflorescence here and there of white salt, is diversified only by the flickering mirage, and by low tumps of windswept sand precariously held together by the roots of stunted bushes of tamarisk and "worgat." In places, pools of salt water crossed the track, which only a few days before would have been impassable. As I advanced on foot, to spare the wearied beasts, the huge mounds of Sân appeared in front looming over the blasted marsh, and red with innumerable sherds of pottery, the accumulation of long-forgotten generations of men—men of whom of old time the Prophet Isaiah exclaimed, "Surely the princes of Zoan are fools, the counsel of the wise counsellors of Pharaoh is become brutish? Where are they? Where are thy wise men?" (Isaiah xix, 11, 12.)

The modern village of Sân is a small collection of mud hovels standing in a pestilential situation on the banks of a canal, once the Tanitic Branch of the Nile, about 10 miles from its junction with Lake Menzaleh and near the west end of the huge mounds which contain the Temple.

Sân, or Sân-el-Hagar, "Sân of the Stones," is the Zoan of Scripture, and its antiquity is spoken of in the Book of Numbers, where it is said (xiii, 22), "Now Hebron was built 7 years before Zoan in Egypt." Upon or close to the site of this ancient Zoan, called also in the monuments Zor, *i.e.*, the Strong, was founded another city, but by whom it does not appear to be certain. The Sanctuary or Holy of Holies, of the great Temple, however, is stated to belong to the sixth dynasty, as the name of King Pepi (Apappus) has been found in that position, and of the twelfth dynasty

monuments have been found at Sân, bearing the names of Amenemhat I, Osirtasen I, and Osirtasen II. That Sân was a place of great importance under the foreign monarchs of the Hyksos dynasties is certain, as Mariette-Pasha discovered many important monuments belonging to them, which are now in the Museum at Boulak. One of these is a group of two figures in dark grey granite. The heads are unfortunately much damaged, but the beards are in the Asiatic form and utterly unlike those of the Egyptians. On the base of their throne are represented aquatic flowers, and fish resembling the grey mullet and a kind of perch or bream. The fore part of a Sphynx in blackish granite, which bears the name of Ra-au-Renen Apapi in a cartouch upon the shoulder exhibits features widely different from the Egyptian. By some Zoan is conjectured, at the early time of the erection of the sanctuary in the sixth dynasty to have been Ha-awar, the Avaris of Manetho. Avaris, however, is placed by Brugsch, but as I believe erroneously, at Tel-el-Hîr. After the conquest of the Hyksos by Aahmes (Amosis) the first king of the eighteenth dynasty, the importance of Sân seems to have declined. It rose again, however, under Seti or Menepthah I, for this king, as also his successor, the Great Rameses, erected such vast and splendid buildings with the aid of the conquered Hyksos people and of the captive Hebrews, that they, and especially the latter, may be considered as the new founders of Sân, which now obtained the name of Pi-Ramessu, or the City of Rameses. The new city, in fact, under this monarch became the principal royal residence and the capital of the Egyptian Empire. Rameses enlarged and added to the sacred edifices already existing, and Brugsch states that the Papyri abound in dates relating to the building of the new sanctuaries, and to works in stone and brick, with whose erection the workmen were burdened. The Pharaoh "who knew not Joseph," was this same Rameses, the king who so grievously oppressed the Hebrews, and the father of the princess who found the infant Moses in his cradle of papyrus in what was afterwards known as the Tanitic branch of the Nile. Sân, then, or Pi Ramesses was the Raamses, one of the "Treasure" or rather "*Temple* Cities," (Pithom or Pi-Tum, the City of the Setting-Sun-God being the other), which are stated in Exodus i, 11 to have been erected by the Hebrews for the King of Egypt. At this period the fortifications of Sân as strengthened by Rameses were so strong and its position commanding as it did the road into Syria, so important, that the city was regarded as the "Key of Egypt." The temples were dedicated to the great Gods Amen, Ptah, and Hormakhu, with whom Rameses associated the foreign Baal-Sutekh, a deity whose worship had been introduced from Phœnicia. Brugsch mentions the interesting speculation that in the Papyri the priests of Zor-Ramses bore the name of *Khar-tob*, *i.e.*, the Warriors, and considers that the Magicians summoned by Pharaoh to imitate the miracles of Moses and Aaron and who are called *Khartumin* in Scripture, probably derived their name from the same word.* As the capital of the Empire Zoan or Raamses was no doubt

* Brugsch, "Hist. of Egypt." Vol. ii, 354.

the head-quarters of the captive Hebrews, and we have the express authority of Holy Writ for the fact that the miracles of Moses were wrought in the "field" or "plain" of Zoan. Psalm xxviii, 12. It was amidst the stately buildings of this city that the wailing of the Egyptians over their firstborn was heard, and in the reign of Menepthath II, the successor of Rameses, the Sesostris of the Greeks, the main body of the Hebrews must have started on their long wanderings.

After the Exodus, although with some fluctuations, Sân, or Tanis, as it was called from the time of the twenty-first dynasty, seems for long to have retained its importance. Thus in Isaiah xix, 11–13 "the princes of Zoan" are coupled with the "princes of Noph," *i.e.*, Memphis, as though those two cities were the principal ones in Egypt, and in Isaiah xxx, 4, "the princes of Egypt" are mentioned as being at Zoan.* The Prophet Ezekiel also, at the time of the invasion of Egypt by the Assyrians, prophesies its destruction, and that "fire should be set in Zoan." How this prophecy has been fulfilled to the letter will be seen hereafter.

At the present time the ancient glory of a royal capital has dwindled down to an even unusually squalid village of mud hovels. Looking eastwards towards the Tel the huge mounds appear to open and the space between is filled with, as it were, an avalanche of immense stones, which are the remains of the western pylons of the Great Temple. Perhaps, however, the most striking view of all is, when coming from the north or south, one gains the summit of the mounds, and suddenly and unexpectedly looks down upon the ruins of a Temple some 600 feet in length and constructed entirely of red granite from the far-off quarries of Assouan. Strewn about in all directions are papyrus-bud columns, obelisks, colossi and shrines, overthrown indeed, but otherwise in a marvellous state of preservation; the inscriptions and carvings in the finest style of Egyptian art, being as fresh as though they had been cut yesterday. It is a great solitude, and brooded over by a deep silence, which makes the scene of ruin and desolation all the more striking. Few scenes in Egypt, the land of wonders, are more impressive, none lay more closely hold upon the imagination. The highest point of the Tel is a small wely or Mohammedan Sheiks' tomb, called "Ryeed-Sân," behind the easternmost sanctuary. Hence northwards across a marsh the eye ranges to the great Lake of Menzaleh, and eastwards and southwards, across a pestilential, uninhabited, and blasted waste; in the dim distances are discerned the tops of palm-trees, marking the limit of cultivated land. Westwards, beyond the hovels of Sân and the ancient canal, extend vast swamps, with here and there scant patches of cultivation, far as the eye can reach.

It has been supposed that the destruction of the Great Temple is owing to a burst of Christian zeal or fanaticism in the time of Theodosius.† Far more likely, however, is the supposition that the overthrow of the Temple was caused by the mighty shock of some earthquake; and this the more so, since,

* See Murray's Handbook. Vol. i, 318.

† Murray's "Egyptian Handbook."

as is also the case in several other instances in Lower Egypt, the vast structures were literally founded on the sand or mud, without adequate support or foundations.

Approaching from the west to the left of the front of the Temple, there is a prostrate statue of the great Rameses sculptured out of a block of the hardest reddish sandstone of a crystalline texture. The workmanship is admirable, and the plaits or bands of the wig or head-dress being in relief and of a yellow colour, the monument may be looked on as a huge cameo. Here also, cut in a block of soft limestone containing shells, is a Sphynx, and three large broken obelisks of granite. At a short distance is a small granite head of a king or deity surmounted by four plumes, and a gigantic head of a king, still preserving traces of red colour. To the right of this first compartment of the Temple is a lateral chapel constructed of limestone.

In the second compartment are several fine papyrus-bud columns covered with hieroglyphs sculptured with amazing skill, and obelisks of magnificent work with their apices perfect.

In the third compartment are more obelisks, on one of which Rameses appears making an offering, in sculpture of the finest style. Several erect colossi occur here in black basalt and yellow and red crystalline sandstone, and some granite remains of the Hyksos. There are also several seated statues in bluish granite, and a sandstone kneeling figure of a sacred scribe bearing a table of offerings. The finest object, however, in this compartment of the Temple, is one of a pair of Monolithic Chapels or shrines. This monument has a coved roof and is covered with sculptures and hieroglyphs within and without. At one end is a Triad of deities, Amen, Tum, and Mut. The carving is absolutely superb, and it is no exaggeration to say that the figure of Rameses on the roof is cut like a gem. The material is crystalline conglomerate sandstone, of a purple and reddish-yellow colour. Many of the statues hereabouts preserve the colours with which they were originally painted, one small black granite statue being coloured green.

In the fourth compartment are more broken obelisks, and in the fifth and last the remains of columns with papyrus-bud capitals. This is the most ancient part of the Temple and dates back to the remote period of the sixth dynasty. The number of obelisks and statues is, in point of fact, quite bewildering, and Pi-Ramessu must have boasted of more of the former class of monoliths than any other holy place in Egypt. Around the Naos, or Holy of Holies, are the marks of a great conflagration.

Surrounding the Temple was a vast enclosure or wall of crude bricks formed of Nile mud, with little or no traces of straw to bind them, and beyond these are the remains of innumerable houses also of crude brick.

Farther off to the north rises a strong and massive rampart constructed of small mud bricks arranged in a very intricate manner, the walls sloping inwards on both sides from the bottom to the top. Between the wall and the Temple are the remains of a gateway constructed of sandstone and granite, near which again are the marks of a great fire. In one place, in

this part of the ruins, lumps of molten glass are strewn about in all directions. Farther north again are traces of the outer wall of the city and again the marks of fire. The mounds hereabout are strewn with pottery of an extremely rude description, from which it may be concluded that this was the poorer quarter of the city. A few hundred yards to the south-west of the west end of the Great Temple lies a prostrate single granite column, and some half-a-mile to the south-east lie the disintegrating remains of a double row of huge columns of red granite, resembling the skeleton of some gigantic saurian ; these last remains being, I should imagine, of a much later period than the other ruins. The mounds of Sân are of great and unusual height and cover a vast extent of ground, testifying to the ancient size and importance of the city. Perhaps nowhere else in the world is the contrast between former magnificence and present destruction and desolation so keenly felt as it is amidst these mighty relics of the past.

FROM SÂN TO EL ARÎSH.

Had it been possible I should have preferred traversing "the field" or plain of Zoan by a line of country to the east of the track by which I had travelled to Sân, seeing on the way the Tels called in the French map Tel Dekîk, Tel-el-Atieh, and Tel Chomeh, which lie a little off the track to the north of the direct route between Sân and Tel Dephneh, and in part of what is probably rightly identified by Brugsch as the district of Succoth.* The water had not, however, subsided sufficiently to permit me to deviate from the main track, or to allow me to visit the Tel further to the north-east, at which Brugsch places the site of Pithom, the city, that is, of the Solar Deity Tûm. This I take to be the place called "Tel-el-Scherig" in the French map, and the ancient chief town of the Sethröitic Nome. I accordingly returned to Salaheyeh and started the following day for Tel Dephneh. I may remark in this place that it seems to me extremely doubtful whether the Succoth of the Bible, which Brugsch would identify with the Thuku or Thukot of the papyri, but as Professor Robertson Smith believes, without sufficient philological authority, was ever applied to a definite place at all.† The name Succoth, *i.e.* Tents (why not huts made of reeds, like those of the present inhabitants of this part of the country?) would more probably seem to indicate a district than a town, and if it be insisted on that the name in Exodus necessarily

* To the west of the direct route there is a sandy Tel, not marked in the map, and bearing the remarkable name of Tel Faraon, the "Mound of Pharaoh." There are no ancient remains.

† It is important to notice that Brugsch, without one word of explanation, calmly changes the "Thuku" and "Thukut" of his *map* into "Sukot," in the *text* of his discourse. "L'Exode," p. 9.

STANFORD'S GEOG. ESTABT., 55 CHARING CROSS

signifies a *stage* in the journey of the Israelites, it might easily have been applied to some particular spot in the district inhabited by the Semitic Nomads, where a number of tents or booths were gathered together. Such an assemblage or encampment might be termed "Succoth," as being *par excellence* a place of tents. As to its position, it would surely be more reasonable to place it at some healthy, sandy spot near Sân, such for instance as the Gezeerch already mentioned, or even at Salaheyeh, than in the midst of the unwholesome marshes a little farther to the north. If on the other hand Succoth were amongst the marshes and a definite place, its site would more probably be found at one of the chain of Tels already named in the direct line between Sân and Tel-Dephneh, rather than farther to the north towards Lake Menzaleh, which is altogether out of the direct route from Raames into Phœnicia. It should be remarked that Professor R. Smith looking at the question from a philological point of view regards Brugsch's identification of the χetam of the monuments with the Etham of Exodus as quite inadequate.*

The route from Salaheyeh lies across a sandy portion of the desert and then approaches the ancient canal already mentioned, and which, in this place is fringed and tufted with quantities of tall reeds. This neighbourhood has at present a bad name on account of its insecurity, and numerous robberies and murders have recently occurred. The Mamour of El-Kantâra has repeatedly forwarded complaints to the Mudîr of Zagazig, but has received no answer; the latter official being probably of opinion that the collection of taxes to repay those Europeans who lent their money to enable the late Khedîv to erect innumerable palaces and to import French actresses, is a subject of far greater importance than a matter which merely affects the lives and property of the people. This portion of the desert is inhabited chiefly by the Masaeed Bedoueen. In five hours from Salaheyeh I arrived at Tel-Dephneh, according to Brugsch the χetam of the monuments and the Etham of Exodus. By some this place is believed to be the Tahpanhes of Jeremiah x, 4, iii, 9, where the King of Egypt is said to have had a residence.† It is undoubtedly the Daphnai of the Greeks. Tel-Dephneh occupies a very commanding situation on "the edge of the wilderness." To the west is a brackish lake of small dimensions, across which extends a Gis'r or Dyke, apparently artificial and ancient. It leads towards the swamps in the direction of Sân. To the north the place is defended by the ancient canal which represents the Pelusaic branch of the Nile, long since silted up. Beyond the lake and canal is a vast tract of uninhabited marsh land; more to the east are the waters of a part of Lake Menzaleh and of Lake Balas, now perhaps at a higher level than formerly. To the south there is the Gebel or "wilderness" upon whose verge the Tel is situated. The view

* Brugsch everywhere assumes that Succoth, Etham, and Migdol, indicate a single day's journey. It may have been so, but it is not so stated in the sacred text.

† Cf. also Ezek. xxx, 9.

from the highest part of the Tel is very extensive, and ranges from the extensive lake country near Port Said to Gebel Attâka on the coast of the Red Sea below Suez, which is plainly visible across the intervening desert. To the east, beyond the mounds and line of the Suez Canal is seen afar off upon the horizon, the lofty rounded form of the natural hill called Tel-Abou-Assap, on the right of the direct route to El-Arîsh. On the north side the highest part of the principal mound descends upon the already named canal, and on the opposite bank is seen, not a Tel indeed, but the pottery-strewn remains of a small ancient town. These two sites are supposed to represent the two ancient fortresses, hence the plural Δαφναι in the Greek name, depictured in a monument of Seti I at Thebes, behind which was a town called Tabenet.* If this be the case then Tel-Dephneh is the Pelusian Daphne mentioned by Herodotus, ii, 30, as having been occupied by an Egyptian garrison for the protection of the frontier towards Syria. The existing remains are extensive and show that the ancient city was a large one. Many large hewn blocks of granite sandstone and limestone are lying about in different parts of the ruins, and especially around the central mound, where also I found several hewn blocks of blue volcanic stone of the same shape as those I afterwards found in greater numbers at Tel-el-Hîr. Hereabouts I likewise picked up three or four hammers or mullers of a hard, close-grained black stone. About a quarter of a mile eastward of the principal mound rises another, the remains evidently of a tower of crude brick which has been destroyed by fire. This mound and the ruins in its immediate neighbourhood to the south are called by the Bedoueen Tel-Farmah. To the south and east of this spot may be traced an ancient road leading towards the lake, and the foundations of numerous streets of crude brick houses. Amongst these last I found the mouth of a well, and the rims of several huge vases of red terra-cotta embedded in the soil, and apparently used to hold water. As regards the identification of this place, once a populous city, but now a complete solitude, with the Etham of the Bible, I will only remark that it could be easily reached in two days from Sân, and that supposing Lake Menzaleh had, as is probable, a lower level in ancient times than at present, Tel-Dephneh would probably be not more than a day's journey from Tel-el-Hîr, which as will be seen hereafter, I am disposed to identify with the Migdol of Exodus. I notice also that the Bedoueen distinctly pronounce the name of this Tel as Dephneh, in *two* syllables, and not as Defenneh in *three*, as it is written in the maps. From Tel-Dephneh I went on in about 3½ hours to El-Kantâra, and crossing the Suez Canal encamped in the half-deserted village, where I was met by Arâdeh, the Sheik of the Suarka Bedoueen and his people, with whom I had arranged for a supply of camels and for guidance across the desert as far as Gaza.

Immediately behind the modern village of El-Kantâra, whereof the

* "L'Exode et les Monuments Egyptiens." Discours par Henri Brugsch Bey. Leipzig, 1875. Throughout this paper I continually refer to this essay.

eastern portion is formed by the deserted shanties of the French engineers employed in the construction of the canal, is the site of an ancient town of considerable extent. Pottery, glass, and other ancient *débris* are scattered about far and wide on the surface of the desert. The most curious objects, however, are the numerous coffins of terra-cotta, whose broken fragments cover a considerable space of ground, some nearly perfect specimens remaining *in situ*. Two large pots, tapering towards the lower end, were employed in each case, and the head being placed in one and the feet in the other, the rims met in the centre, thus completely enclosing the corpse. I had previously found some somewhat similar interments in a railway cutting near Alexandria. These pots are of coarse fabric, very thick in texture, and of a red and blackish colour. From these ruins two monuments have been removed and may now be seen in the French village. One of these, at present perched on the top of a deserted house, resembles in colour and general contour a red chimney-pot, but the top is conical, and it is perforated with oblong apertures, resembling windows; on one side is an obscene effigy, crowned with the feathers of Bes, and it is probably a comic representation of that deity, although the face is more youthful than is common. Like the terra-cotta coffins, it belongs to the Roman period. The other monument, which is of far greater interest and importance, is placed in the centre of the principal thoroughfare. It is a kind of obelisk, now unfortunately truncated, although still more than 6 feet high, and formed of the splendid hard sandstone conglomerate, which was used for some of the coeval monuments at Sân. On three of its sides—the fourth is entirely defaced—this stone bears hieroglyphic inscriptions, amongst which are several royal cartouches, including that of Rameses II. Above are seen the lower portions of several truncated figures. The ruins just described are, in my opinion, far *more* likely to have been Migdol than the paltry and utterly insignificant remains at the point called by Brugsch Bey, Tel-es-Samût. This name, I was assured by Sheik Arâdah and all his people, as well as by a most intelligent Arab who joined my company, the Hadji Abdullah of El Arîsh, who is perhaps better acquainted with the district than any one else, is utterly unknown, an assertion which, to say the least, is remarkable. At a distance, however, of about three hours from El Kantâra, and so far as I can judge, at the point indicated in Brugsch's map as Migdol, I found a small Tel, a mere heap of burnt red bricks and a little pottery, to which the Arabs, one and all, assigned the name of Tel Habooa. That these pitiful remains, however, can by any possibility be Midgol, I utterly disbelieve. Turning to the left, however, from the main track, across a portion of the Gebel called El Adâm, I arrived at Tel-el-Hîr, the Tel Uar and Avaris of Brugsch. Before this point was reached the way descended into a marsh without vegetation, save that a few stunted at'l or tamarisk bushes, and a few patches of rushes, but no reeds, grow in the salt unkindly soil. Crossing an elevation, also, a distant view is obtained of the two or three palms which grow in the desert near the Bîr of Românah. Românah, by the way, is not a *place* as it is marked in the maps, but a *district* of the desert of considerable extent.

Tel-el-Hîr marks the site of a town of large extent and considerable importance, and its surface is strewn with innumerable sherds of pottery, ancient glass of fine quality, and bits of hewn stone. Of these last, the most curious are numerous rectangular-shaped pieces, cut with great care out of what I believe to be the blue volcanic stone or lava of the distant Haurân. As two of these ⌐ shaped stones placed together form an oblong or square, I conjectured that they might be the frames of windows, but the Bedoueen thought that they originally formed the mouths of tanks or wells. This conjecture is at least as probable as the other, but neither seems to be very satisfactory. On the west side of the Tel, the one that is farthest from the desert, rise the remains of a massive square tower, each of whose sides measures about 94 paces. The north, south, and western sides of this fortress descend into an immense desiccated lake or marsh, which extends westwards far as the eye can reach, with its brown surface unrelieved by any vestige of vegetation. The eastern side of the tower, which is built of crude brick, is joined to the rest of the sandy Tel, which extends eastwards to the desert. In Brugsch's map this Tel is called Ha-uar or Avaris, but the French map,* and that I believe correctly, designates it as "Tel Hîr, *Migdol de la Bible.*" It is at once evident to the eye that this was an important frontier fortress, and its importance is such as to justify its being considered the Migdol or fortress *par excellence*, and to justify the Greeks in continuing and perpetuating its more ancient name under that of Magdolon. Scattered about in various parts of the Tel I found several ill-preserved brass coins of the Ptolemies, and on the western corner of the tower I saw one of the Bedoueen stoop down and pick up what proved to be a gold coin of the Fatimite dynasty.

It is likely that before the construction of the Suez Canal, whose distant mounds would now intercept the view in that direction, Tel-Dephneh (Etham ?) could have been visible from Tel el Hîr (Migdol), and if we can suppose that lakes Menzaleh and Balas anciently stood at a lower level, which, from what is certainly known of Lake Menzaleh, is a probable conjecture, then it might have been possible to reach the latter city in one day's journey from the former. Brugsch records the interesting fact that during the eighteenth dynasty, King Amenophis IV summoned workmen from Elephantine to Samout, Samout being the Egyptian name of Migdol. This illustrates Ezekiel xxix, 10, and xxx, 6, where the marginal reading "*from Migdol to Syene*" is doubtless the right one, and indicates Egypt from its northern to its southern extremity ; the reading in the text "from the tower of Syene even unto the border of Ethiopia" being sheer nonsense.

Leaving Tel-el-Hîr, I pursued my route in a northerly direction for about 1½ hours, when crossing a ridge I suddenly saw before me the vast mounds of Tel-el-Fodha rising up from out of an immense marsh with the outlying Tel-el-Dahab at a short distance to the right. At some distance to the left rose the fortress-like Tel-el-At'l, and behind, afar off, the Kulat,

* Avril Frères. Paris, 1861.

or castle of Tineh.* This square tower, for such it appears to be, rises, as I was assured by Hadji Abdullah, from the centre of a small lake at a short distance from the sea, and is built of stone. I should imagine it may be an Arab work. Tel-el-Fodha, "the Mound of Silver," is the Arabic name of the Tel which marks the site and embraces all that remains of the ancient Pelusium or Sin, anciently, "the strength" and key "of Egypt."† Tel-el-Dahab, "the Mound of Gold," of the Bedoueen, appears to be the "Faramah" of the maps; but the Arabs unanimously denied the knowledge of any such a name, and asserted that the only name resembling it even is that of Tel-Farmah, already described as a part of Daphne. The Mound of Gold rises at only a short distance to the east of the Mound of Silver, and appears to have been a great outlying fortress of Pelusium. The names by which these Tels are known to the Bedoueen have been given from the number of coins which have been discovered on their site.

Arrived at the edge of the marsh it at once became evident that no camels could pass upon the treacherous soil without being engulfed. I therefore ordered my tent to be pitched in the desert to the right, and taking with me two of the Bedoueen, prepared to cross the swamp on foot. I had gone but a short way when I found the circle of an ancient well, formed of burnt red brick. The difficulty of proceeding was great. The surface of the marsh, which extends for miles, was covered with drifting sand, and with not only an efflorescence but with long crystals of brown salt, through which, as through a cake, the feet went down into a greasy mud, of which large masses adhered to the boots each time they were withdrawn. The farther I went the wetter did the marsh become. Over and over again I was tempted to turn back, and when I was within 200 yards of my goal farther progress seemed impossible, as at every step I sank nearly up to the knees in mud. However I persevered and at last had the satisfaction of standing on the remote and rarely visited site of Pelusium or Sin. The Tel, which in truth is an island, rising from a vast lake of mud, which must occasionally be covered with water, is of very large extent, scarcely less I should suppose than 2 miles in length. Its surface is red from the quantity of broken pottery. One part of the city, near the centre, seems to have been fortified, or at all events divided from the rest by a massive wall of crude bricks. To the north-east of this is a massive fragment of a wall of burnt red brick, apparently of the Roman period, and at some distance to the west, lying on the surface of the Tel, are the overthrown remains of a small temple of red granite. Several columns remain entire; there are no hieroglyphics, but its date may be safely assigned to a late period, that, probably, of the Ptolemies. The top of the Tel commands a view of the sea, breaking on a sandy beach on the other side of a swamp, at a distance of about 3 miles, of great

* Sir Gardner Wilkinson strangely enough confounds Tineh with Pelusium. See Murray's "Lower Egypt."

† Cf. Ezek. xxx, 15, 16.

trackless marshes of brown mud, and southwards of the Gebel. The desolation is complete and awful. There is no fresh water, no sign, and indeed no possibility, of human habitation, and the silence was alone broken by the hoarse murmur of the distant waves.* I returned across the swamp to the eastward of my former track, passing on the way a small circular Tel slightly raised above the mud and covered with ancient pottery. Hadji Abdullah afterwards assured me that amidst these desolate swamps there exist signs of former habitation ; wells, sakiehs, and trees, and of these last I saw some traces myself. What can have caused this widespread and complete desolation ? and when was this tract of country overwhelmed ? The sun had set before I had crossed the marsh, and on the edge of the desert I was rejoiced to find an Arab who was on the look-out to conduct me to the tent. Night had fallen before I reached it. That night on the brow of a hill above my tent, when listening to the distant music of the sea, borne to me across the marshes by a north wind, I saw the quick flash of the lighthouse at Port Said, distant, I should suppose, 25 or 30 miles.

My object next morning was to visit the supposed site of Pihahiroth. I accordingly directed my course in a north-easterly direction, and after passing several places with signs of ancient occupation on the skirts of the desert, I reached the open shore of the Mediterranean in about 2½ hours. After a welcome bath in the waves I pursued my course eastwards along the beach, making for a low *Ras* or headland, which I reached in little more than an hour. This Ras, incorrectly named "C. Românah" in the English charts, is known to the Bedoueen of the adjacent desert as *Gelse*† *Hemdeyeh*. On reaching it I found that it is a sandhill of moderate elevation, with its sea-front defended by massive walls and towers of hewn limestone, parts of which, undermined by the waves, have fallen upon the beach. The interstices of this limestone are filled with a yellowish spar. On ascending to the top of the Gelse I saw at once that I was indeed at "the entrance of the Gulfs," at the Pi-ha-Xirot of the Papyri as cited by Brugsch, if not at the Pihahiroth of the Book of Exodus. Eastwards, far as the eye could reach, extended a narrow strip of sand, with the Mediterranean on the left hand, and the great Lake Serbonis on the right, upon the opposite side of which the low desert hills shimmered in the heat and mirage. Southwards also the lake extended itself behind the Cape whereon I stood, for during the hour I had been traversing the sea-shore I had unknowingly passed its westernmost extremity. I may mention here that the usual Arabic word for a cape or headland, *Ras*, is unknown by the Suarka Bedoueen, who term a promontory "*Gelse*," calling this one Gelse Hemdeyeh and Mount Casius "El Gelse," the Gelse, *i.e.*, or Headland, *par excellence*. The name Cape Româneh applied to this promontory by the English Admiralty Chart is also unknown to the Arabs, and is not strictly correct, although the neighbouring *district* indeed, as already stated, is called Româneh.

* Cf. Ezek. xxx, 15.

† I spell this word as it is pronounced.

After exploring Gelse Hemdeyeh, which besides the walls already mentioned, affords the usual signs of an ancient town and the shaft of a brickwork well in the face of the low cliff, I descended, and commenced my journey along the strip of sand between the sea and the lake, with the intention of regaining the desert at Mount Casius, which *Brugsch's map*, which I had with me, *represents as joined to the Gebel by a tract of sandy desert hills.* Little did I then imagine that the whole course of my route would be altered by that Isthmus being a mere creature of the learned doctor's imagination and having no existence in fact !

I travelled for 4½ hours along the strip, when the setting sun warned me it was time to camp for the night. I found the beach between the two waters to be extremely narrow, seldom more than five or six hundred yards in width and generally much less. The best track for the camels was actually at the very edge of the waves, for there the sand was hardest. Above the water mark there occur occasional tufts of stunted tamarisk, the white-leaved " worgat," and a salt shrub with small round succulent leaves, somewhat like a kind of iceplant. The roots of these shrubs permit the formation of small low tumps of sand, and their dead roots and branches afford a scanty supply of fuel, which in our case was supplemented by the abundance of drift wood upon the shore. Under the lee of one of these tumps my tent was pitched at a distance of 80 paces from the sea and 200 from the lake. A light northerly breeze was blowing, and the Mediterranean broke with a loud noise upon the beach and exhibited several lines of white-crested breakers. About 2 o'clock in the morning I was awakened by a noise, and found that the wind had changed, and a furious south-east-by-east wind was blowing across the lake, and threatening to sweep my tent away ; I accordingly dressed, awoke the Bedoueen and had the tent pegs fixed afresh ; I then lay down and slept in my clothes until 5 A.M. On rising I found the fury of the wind had abated, but a fresh breeze was still blowing across the lake. Going out, I found to my surprise that " the sea had seen that and fled." There was now a dead calm, and the sea had retired no less than 26 paces farther back from the point it had reached the previous night. From this circumstance one may form the following opinion.

Presuming that other portions of Brugsch's theory as to the route of the Hebrews at the Exodus are correct, one might admit that supposing the sea, driven by a strong north wind, were breaking over the beach into Lake Serbonis, the water would be driven back or divided by a south or south-east wind, and the track between the two waters might then be poetically described as having a wall of water upon either side. The wind again returning to the north and blowing with violence would cause the sea to sweep over and inundate the narrow belt of land, and would naturally drive any passers-by towards the lake. Here however, the sands are but quicksands, and men, horses, or chariots would speedily be engulfed and overwhelmed. Whatever may have been the truth with regard to the pursuing host of the Egyptians, it was probably in this way and near this spot that the invading army of the Persians under Artaxerxes, mentioned

by Diodorus met with its destruction. I should perhaps have mentioned before that the previous evening I repeatedly tried to get near enough to the lake to dip my hands in the water, but I failed on every occasion. When I got near—and sometimes I got within 3 or 4 yards—the treacherous sand gave way under my weight, and I was compelled to retire on pain of being engulfed in the mud beneath. The surface of the beach throughout its whole length is exclusively composed of sand, but in places layers of a sort of recent conglomerate are strewn about, which serve to strengthen the fabric of the beach. This conglomerate is formed by the action of the rain, which dissolving the lime of the innumerable shells forms a cement which binds them together with the sand into a stone of considerable hardness. It was easy to see during the entire journey how much the narrow beach would be narrowed by the rise of the sea when raised by a gale from the north, and how in some instances the Mediterranean would be driven across into the lake, then and so, as in Strabo's time, temporarily making Mount Casius an island.* This indeed in some places from the scour across the beach seemed actually to have occurred within a recent period, as indeed has been the case within the experience of my fellow-traveller Hadji Abdullah, and the deposits of pumice-stone from Santorino or some other volcanic Greek island which I found on the shores of Serbonis, shows conclusively that the sea occasionally breaks over into the lake.

I left my first camping ground between the waters at 6.30. Behind me the Gelse Hemdeyeh lay like a purple line upon the pale blue waves; in front the rounded yellow summit of Mount Casius bounded the view along shore; while a long wavy flock of countless flamingoes crossed over the beach on their way from the sea to the lake. In about 20 minutes I arrived at a point where a low natural causeway slightly raised above the water, extends in a north-easterly direction half way across the lake from the opposite Gebel. This is not given in Brugsch's highly imaginative map. After passing this point the ribbon-like lake widens considerably, extending farther back into the desert, which forms throughout its southern boundary. Far off the distant range of Gebel-el-Hâleh now appears in sight. The lake here can scarcely be less than 8 miles across, but the clearness of the atmosphere on the one hand and the moving mirage on the other, alike render it hard to compute distances with accuracy. The whole coast between the two headlands along which I was passing appears to be particularly dangerous for shipping. The beach is everywhere strewn with masts, spars and other fragments of wrecks, amongst which the boilers of more than one steamer are conspicuous. The quantity of shells too, is everywhere extraordinarily great. This day's journey was very hot and fatiguing to the laden camels, and as there was no chance of reaching the Gelse before nightfall I consented to stop about an

* Strangely enough, Herr Brugsch, who cites this fact from Strabo, does not perceive that it destroys his imaginary Isthmus of communication from Mount Casius to the mainland.

hour before sunset, and for the second time pitched my tent close to the sea.

At 10.45 the following morning I arrived at the Gelse ; before which point is reached the strip widens out considerably. The western prospect of the Cape shows a long gradually ascending ridge of sand scantily covered with desert scrub, running seawards from the lake, and ending in a rounded dome of bare yellow sand, whose base rests upon the sea-beach. The height is stated in the English Admiralty Chart as 272 feet. The name given in the same chart and followed by other authorities for Mount Casius, "Kas" (? Ras) Bouroum, is Turkish and signifies Nose (Naze). It is of course unknown on the coast. From its eastern side the outline of the Gelse is very different, five truncated cones of sand rising from a ridge which runs inland from the sea towards the lake. I expected to find, but looked in vain, in the sea-face of the promontory for a nucleus of rock which would account for the accumulation of sand to such an unusual elevation ; all, however, was sand. Hadji Abdullah having reported the existence of a Bîr on the western side of the Gelse, Sheik Arâdah sent the thirsty camels round while I ascended the hill, but the Bedoueen failed to find it. Near the summit a few hewn stones and fragments of ancient pottery and glass—sure signs of ancient occupation—are strewn about at the edge of the cliff, but I could discover no traces of the Temple of the Phœnico-Egyptian "Lord of the Lagoons" or of his Greek successor, Zeus Kasios. The remains of the Temple doubtless lie concealed under the drifted sand on the summit of the ridge, which in places is so extremely narrow as scarcely to admit of the passage of a single person. At any rate the ridge, like Slieve League in Donegal, is at best only a "one man's path." Southwards the ridge descends in steep "combes" and slopes of pure sliding sand to a small wady or rather dell, whose sides are prettily clothed with bushes, amongst which I noticed the white broom so common in Palestine, but which I now for the first time saw on Egyptian soil. Here also, as afterwards, I found an immensely large variety of Orobanche with brilliant canary-coloured flowers, which I had only found before on the small "Nelson's Island" in the Bay of Abou-kîr. Towards the bottom of this valley are one or two palm-trees, and below them the dell descends to the shores of a small bay of the lake. A few poor Bedoueens have lately come to occupy the Gelse, and they obtain sufficient food amidst the scanty scrub for their camels and asses and for a few sheep.

I am not competent to give a definite opinion whether as Brugsch-Bey alleges, Mount Casius is the Baalzephon of Scripture, or whether the identification of the latter with the Baal-Zapouni of the papyri can be sustained. On the one hand, one would certainly be more inclined to look for a place bearing a Semitic name upon what was in ancient times the high or royal road from Egypt into Phœnicia, rather than on the western shores of the Gulf of Suez, or where it is placed by Mr. R. S. Poole, about 30 or 40 miles north of the present head of the Red Sea. On the other hand if, as I am compelled to believe, the route proposed by Brugsch be

almost entirely a mistake, then I must consider the identification of El-Gelse or Mount Casius, like that of the other places to be also "not proven" and a failure.*

The prospect from the top of the Gelse is curious. Northwards, its summit commands a wide view of the sea; westwards and eastwards the eye ranges over the long yellow strip of sand between Serbonis and the Mediterranean, with the glittering water upon either side; southwards across the lake, are the sandhills of the desert backed by a fine chain of distant mountains. Spite of the denial of the Bedoueén, that any access existed from Mount Casius to the mainland, it was not until I stood upon the top of the Gelse that I realised the utterly false impression conveyed by the map appended to Brugsch-Bey's "L'Exode et les Monuments Egyptiens" and reprinted in his History of Egypt. The learned savant *connects the Gebel with the Gelse at this point by an Isthmus of desert which he colours yellow to represent sand, and shades with black to represent hills.* I was literally aghast with surprise to discover that the whole of this representation *is a sheer invention and creature of Herr Brugsch's imagination.* It is indeed true that a little to the east of the Gelse a narrow natural causeway scarcely raised above the water extends about half way across the lake in a north-easterly direction and *obliquely* from the desert. It is true also, as I ascertained from Hadji Abdullah, that before 1878, when Lake Serbonis was partially dried up by the silting up of its single communication with the sea, a few Arabs had succeeded in wading through the mud from the mainland to the promontory, *but of an Isthmus there is no trace; sandy, desert hills in the position indicated are non-existent!* I had read of a *faith* which by a striking figure of speech is said "to remove mountains," but I had certainly no previous idea of the possibility even of an *assurance*, which, in order to support a theory, howsoever brilliant, could *invent* topographical and geographical features and then place them in a map as *real!* I had originally, in reliance upon this precious map, determined to cross from Mount Casius to the desert of the mainland, and could not imagine why the Bedoueen had pronounced such a route to be impossible, but I now saw that it was so, and that I must pursue my journey along the second division of the strip of sand between the sea and the lake, and get out from thence as best I could, all communication with the mainland being here impracticable. It is, of course, absurd to contemplate the possibility of a vast host like that of the Hebrews, laden with rich spoil, encumbered with flocks and herds, and flying moreover from a pursuing army, wading through an expanse of mud some miles wide, even if at the time there were no water in the lake. But the presumption is that there *was* water; the narrative

* It is fair to remark that if Gelse Hemdeyeh be Pihahiroth and El Gelse Baal-zephon, *the curve of the sea-coast is such* that the former *could* be spoken of as "over against" or *vis-à-vis* with the latter. Exod. xiv, 2. But it would surely be more natural to speak thus of places within sight of each other and on opposite sides of the lake."

plainly states, and Brugsch's whole theory of the Exodus depends upon the fugitives having passed along with water on their right hand and upon their left. In either case then the theory breaks down, and, with however great reluctance, must be given up as unsupported by facts and consequently untenable. This being so, the remark may be allowed that it was scarcely fair of Herr Brugsch to construct a map and publish it to the world without having himself visited the place depicted.

And now I must advert to another important fact which goes also to prove that Herr Brugsch's theory as to the route taken at the Exodus is utterly untenable.

Dr. Brugsch states with the utmost probability that the *Jâm Souph*, (translated Red Sea in the A. V. of the Bible), through which the Israelites are said to have passed, signifies the sea of "algues, roseaux, joncs, plantes de papyrus," and he assumes that Lake Serbonis anciently abounded with that sort of freshwater vegetation. That Souph, or Sûf, does bear this meaning may indeed be taken as certain. Gesenius translates the word "rush, reed, sea-weed." Thus in Exodus ii, 3, Moses is said to have been laid in an ark of Sûf, and elsewhere in the A. V. the word is translated "bull-rushes," "reeds," "flags," and "paper reeds." Cf. Isaiah xix. In Jonah ii, 6, *only*, the signification of the word is extended to mean sea-weeds.

Now it is almost impossible to believe that Herr Brugsch can ever have visited Lake Serbonis, for if he had done so he would never have pressed the Hebrew term "Jâm Sûf" into service in support of his theory, or have imagined that the name in question could ever have been applied to Lake Serbonis. It must be borne in mind that in order to justify the appropriation of the name to any sea or lake, that tract of water must be shown to have abounded in some *remarkable* and *striking* degree with either a marine or a lacustrine vegetation. But what are the facts of the case? The waters of Lake Serbonis are salt, salter no doubt than that of the neighbouring Mediterranean. They are *salt* because they are *probably* derived in part by the infiltration of sea-water through the sand of the intervening beach along its whole length, and because they are otherwise exclusively supplied from a single aperture from the sea. They are *salter* from the constant evaporation which takes place from so vast an expanse of salt water running so far into the dry and scorching desert. The lake in fact may be regarded as one vast salt-pan. Now it is not too much to assert that a like physical condition must always have existed. There is no trace of evidence, no probability, no possibility even that Serbonis was or ever could have been other than a salt lake. Now, as every one, except Herr Brugsch, well knows "roseaux, joncs, et plantes de papyrus," which are all freshwater plants, do not and cannot grow in brine, and as a matter of fact they *do not grow in Serbonis* at all. The clear bright waters are as devoid of lacustrine vegetation as the Dead Sea itself. Of it there is no trace whatsoever. But more, it is likewise matter of fact that Lake Serbonis is almost equally devoid of *marine* vegetation. With the exception of rare and infinitesimally small quantities of a green filmy

species of ulva there are no sea-weeds of any description whatsoever in the lake. I may add that the Mediterranean also, all along the coast which runs parallel with Serbonis, is entirely devoid of marine vegetation. Not a morsel appears thrown up upon any part of the beach, the reason probably being that the sea-bottom, being entirely formed of shifting sand, affords no root-hold for sea-weeds. From all this it conclusively appears that Lake Serbonis is not, and cannot be the Jâm Sûf, the Lake or Sea of Reeds.

It may be proper to notice here that the Bedoueen call both the Mediterranean and the Lake "El-Bahr," "the Sea," but commonly speak of the former as the Salt Sea or the Great Sea.

The camels which had been despatched in quest of water having at length come round into the dell, I was led over an acclivity near its lower end into a kind of deep basin surrounded on all sides by steep slopes of sliding sand. At the bottom of this were about a score of circular holes, excavated in the sand, and by scooping therein a little slightly-brackish, but drinkable, water can be obtained. The supply, however, is very scanty, and in nearly 2 hours' time we obtained only enough to fill two water jars and none for the camels. Emerging from the sandhills at the eastern end of the Gelse, I once more found myself upon the strip of sand, and in little more than half-an-hour reached the only permament habitations upon it, a cluster of a few huts, called El-Matarieh, and tenanted by a few fishermen and their families. The surprise of the people at my unlooked-for appearance was great, as no Frank had ever passed that way before. I found the ex-Sheik suffering from a severe attack of fever and ague, and left him some quinine, with directions how to use it. The people had a few boats on the sea-beach as well as on the lake, but they draw their principal supply of fish from the latter. Their water is obtained from the wells already described at El-Gelse. I purchased a quantity of white mullets and of a sort of sea perch for myself and my Arab attendants, and found the last-named fish delicious. Unwilling to camp near a place redolent with such "an ancient and fish-like smell," and so unwholesome withal, I pushed on, and again encamped on the beach at a point an hour distant from the huts. The lake hereabout is very wide; at one point, I should suppose it is scarcely less than 12 miles across.

I started next morning at 7. At a point 1 h. 30 min. distant from my camping-place, the salt vegetation upon the beach, which had ceased for an interval, recommenced. In 2 hours 20 minutes, I passed a small island in the lake not far from shore, and hereabouts I noticed a most unpleasant and mephitic smell. At 3 hours from my starting-point, the strip becomes wider. It is somewhere here that Brugsch places in his map an entirely imaginary inlet of the sea, and the site of Ostracina. Sir Gardner Wilkinson likewise places Ostracina in this neighbourhood, and says the site is now called "Ostraki." This name, however, is unknown to the Bedoueen, and there are no ruins or other ancient remains upon the beach. Perhaps it was on the southern shore of Serbonis. At 4 hours 5 minutes, the "strip" proper ceases, and the lake retreats towards

the desert, leaving between itself and the sea an absolutely flat waste, utterly destitute of herbage, and *apparently* reaching from the sea to the mountains. At 4 hours 45 minutes, the lake again approaches the sea, and the strip of beach becomes not more than 50 feet wide. Hereabouts the wet sand was marked by the footprints of a large hyena, and I learned that these animals are in the habit of swimming across from the desert to pick up dead fish which are washed ashore. At 12.30 P.M., 5½ hours from my camping-place I arrived at the end of the lake, and at the spot where a narrow channel connects it with the sea. In the midst of this channel is a tiny island, and from this, to my inexpressible relief, a small boat put off and came across. The camels were now made to lie down at the extremity of the spit of sand and were unloaded there. Meanwhile, I and my party were ferried across to the island with the baggage and water-jars, two persons only being able to cross at a time, for the boat was old, rickety, and half full of water. The sea-water was running through the channel into the lake like a mill-race, which cannot be wondered at, when it be remembered that this is the only inlet into the lake, and that the evaporation from so large a body of water must be enormous. Before this inlet was re-opened a few years since Serbonis had become nearly dry; a bog rather than a lake. The islet to which I was ferried over is circular in form, and only 54 paces across. At a few yards distance from the water is a sort of rude encampment, formed by a circular hedge of scrubby fuel brought across from the desert. Within this the fishermen bivouac in the open air. While my tent and water-jars were being brought across in the boat, the camels were driven into the sea and compelled to swim across to the islet. The scene with these ungainly animals amongst the waves with the naked Arabs screaming and splashing around them was a very strange one, and I certainly never expected to see "ships of the desert" taking to the sea. The fishermen on the islet, like those of El-Matarieh, are immigrants from the country bordering on Lake Menzaleh. They obtain their supplies of water by means of camels and asses from El-Arîsh, and they live upon fish. Their manner of cooking has the merit of simplicity. They chuck the fish into the fire, and when they are burnt black, take them out and eat them. The transit to the islet took nearly two hours. When the camels and baggage had all arrived, the former were reloaded, and mounting we commenced to wade across through the sea to the mainland. Fortunately, there was no wind, and the sea was perfectly smooth, but even so, the water came up to the bellies of the camels. Had the sea been the least rough, the passage would have been impossible, and I should have been compelled to retrace my steps with thirsty animals along the weary length of sand between the sea and the lake. It was, then, with the utmost satisfaction that I once more found myself on *terra firma*.

The route I had thus taken is undoubtedly shorter than that usually taken across "the short desert" between Egypt and Syria; but the scarcity of water, the precariousness of encamping on an exposed beach, and the chance of the ferry being impassable in rough weather, render it

one little likely to be generally adopted. None of the Bedoueen who accompanied me had ever taken that route before except Sheik Arâdah, who had done so once in his boyhood. His father, then Sheik of the Suarka, had on one occasion been employed by the Egyptian Government, to convey some prisoners from El-Arîsh to Cairo; and in order to effect this secretly, they passed along the coast instead of inland. Hadji Abdullah, a native of El-Arîsh, had traversed the strip several times.

The French map of 1861, which includes a portion of Lake Serbonis calls it "Lac Desséché," and as already mentioned, I learned that till about four years ago, Serbonis was rather a swamp, "the Great Serbonian Bog," than a lake. This desiccation was occasioned by the silting up of the channel, which, for the greater convenience of fishing, the fishermen of El-Saranît, for so the place of passage is called, are most anxious to keep open.

Evening coming on, I again encamped near the sea-shore, and the next morning arrived at the Wady, Fiumara, or dry Torrent-bed of El-Arîsh, so strangely and misleadingly termed in the A.V. "the *River* of Egypt." The town, or rather village, of clay-houses, stands between the desert and the sea, at the distance of about $1\frac{1}{4}$ mile from the latter. It is dominated by a dilapidated fortress erected by Sultan Selim. To the west of the entrance of the Wady, close to the sea-shore, and near a Wely called Nebbi Jasar are the remains of some ancient houses, one of which shows a ground plan of no less than seventeen rooms. Occasionally in winter, when heavy rains have fallen amongst the mountains inland, the Wady of El-Arîsh is temporarily a turbulent, rushing torrent, but as, during the rest of the year, it is a wide, dry Fiumara, it is to be hoped that the company of revisers of the Old Testament will excind the word "River," which to an English ear conveys an entirely different idea. El-Arîsh, or rather the Wady at that place, is the natural boundary of Egypt, and appears as such in many maps. It is not, however, the political boundary between the Turkish Empire and the Vice-realm of Egypt. That is a day's journey farther on towards Gaza, at a place called Râfeh, the ancient Raphia, where two ancient pillars have been re-erected as a land-mark to the left of the track out of Egypt into Syria.

I cannot close these notes without mentioning the aid I received in negociating with Sheik Arâdah from Messrs. Floyer and George, and from Suleyman Effendi, all of the Telegraph Department of the Egyptian Government. I have also to thank the last-named gentleman for the loan of his excellent tent. My thanks are also due to Rogers-Bey for his kindness in procuring me a letter from Riaz-Pasha, which proved of use on several occasions. To Sheik Arâdah, I shall always feel grateful, for at his hands, I met with the courtesy of a high-bred gentleman, the kindness of a friend, and the ready and cheerful service of the best of attendants.

NOTES ON COLONEL WILSON'S PAPER ON THE MASONRY OF THE HARAM WALL.

By Lt.-Col. Warren, C.M.G., R.E.

Colonel Wilson informs us that these "Notes on the Haram Wall" were written two or three years ago as part of a revised edition of the "Notes on the Ordnance Survey of Jerusalem," but that he was obliged, from press of work, to lay them on one side, and was unable to continue them.

In the perusal of notes thus prepared to accompany Ordnance Survey plates, we ought to have the advantage of his matured and well balanced opinions; but, unfortunately, apparently for want of time, the account is very much abridged, and some very important matters are either entirely omitted, or but slightly alluded to.

Lieutenant Conder has already, in his observations on these notes (published in the last Quarterly), shown that the identifications of Colonel Wilson are open to considerable qualification, and that many of his suggestions are wanting in any authorised support from local indications or historical or traditional evidence, and to this I may add the very important fact that he has in these notes expressed very decided views as to the dates of construction of the walls of the noble sanctuary and site of Solomon's Temple, though unfortunately they are obscured by many inconsistencies.

I submit that it is of very great moment that we should clearly understand exactly what are Colonel Wilson's views, as he has devoted so much study to the subject, and I will therefore endeavour, if practicable, to eliminate the apparent misconception into which he has fallen, and state, in a few words, the theory he advances. I may possibly fail to do this satisfactorily, but I can at least point out the discrepancies which occur, and the difficulties arising therefrom, in weighing his proposals.

Colonel Wilson follows Mr. Fergusson in supposing the original wall of Solomon's Temple to be east of Cistern XIX, at the south-west corner of the sanctuary, in attributing the building of the "great course" in the south wall to the time of Justinian, and in identifying Mount Moriah with Mount Zion.

Yet he materially differs from him in attributing the building of the whole sanctuary wall to King Herod, Mr. Fergusson allotting only part of the south and west wall to Herod. It is necessary to show that Colonel Wilson does actually attribute the whole sanctuary wall to Herod in many passages in his notes, because he also disagrees with himself in many other passages on this subject.

He states there were *five periods of construction* in the sanctuary wall which follow each other in the following order :—

1. The large stones with marginal drafts.
2. The large stones, plain dressed.
3, 4, 5. Medium-sized, and small stones.

Now the sanctuary wall, west, south, and east, is built of large stones with marginal drafts. Thus it is obvious that he attributes the whole of

the sanctuary wall to one epoch, and from the following it is clear that this epoch was the time of Herod.

P. 13. "On Herod's re-construction of the Temple the existing Haram Wall and Robinson's arch were built."

P. 14. "The Haram Wall was built by Herod."

Yet he differs from Mr. Fergusson and from himself in attributing the wall of the south-east angle to Nehemiah, and in stating that the wall of "wailing place" is a re-construction out of old materials, and again appears to be at variance with himself in affirming that the masonry from Wilson's arch to south-west angle is of exactly the same character, and again in stating that the masonry of the south wall is of two or three different kinds.

If there was but one epoch of large marginal drafted stones, and that epoch was the time of King Herod, how can there be three different periods (of marginal drafted stones) in the south wall? How can Nehemiah, Herod, and Justinian, over an interval of 1,000 years, have all built with the large marginal drafted stones?

Colonel Wilson affirms that the whole wall was built by Herod, and yet that only a part was built by him; that the large marginal drafted stones belong to but one epoch, and yet belong to three periods; that the sanctuary wall from the south-west angle to Wilson's arch is of one identical character throughout, and yet that the portion about the wailing place is a re-construction out of old material.

His views as at present expressed cannot be properly synchronised. In one case we have—

a. Large marginal drafted stones, cut at one epoch and used in building the whole of the Haram Wall by King Herod.

In another—

b. Large marginal drafted stones used—

1. In time of Nehemiah, south-east angle (p. 64)
2. „ Herod, south-west angle (p. 64).
3. „ Justinian, south wall (p. 65).
4. „ Nehemiah, Herod's "Castle of Antonia" (p. 44).
5. „ before Herod. Wailing place (p. 17).

Colonel Wilson thus would propose that large marginal drafted stones were used in building for at least 1,000 years, viz.:—

From the time of Nehemiah to the time of Justinian.

I can quite comprehend the use of such stones from the time of Solomon to Herod, because, during that period, the feeling of the country was decidedly Eastern, and the ancient system of building would be kept up; but after the time of the Herods western influences prevailed and he adduces no authority for supposing that in the sixth century a Christian Emperor used large marginal drafted stones; indeed the account of Procopius appears clearly to prove that the stones were not large, comparatively speaking.

The ambiguity and obscurity of these and other affirmations will probably detract from the value of Colonel Wilson's notes, and being

thus so uncertain, it is very difficult to review his deductions as a whole.

Other weak points appear to be the hypercriticism accorded to many of the measurements taken by myself and others, from which there is an inference that the measurements are not sufficiently accurate (*vide* "The Temples of the Jews," pp. 11 and 172), the comparison of measurements on unrevised plans with those that have been revised, the collection of matter, sometimes partially from the "Recovery of Jerusalem," ignoring what was said in the original letters; sometimes from the original letters alone, ignoring the more complete account in other writings.

As an example, it is stated that I believe that the "Red Heifer Bridge" commenced at a point 600 feet north of the south-east angle. Now I may once have suggested this, but if so, it was a long time ago, for both in the "P.E.F. Quarterly," April 1875, and in "Underground Jerusalem," I have proposed the Red Heifer Bridge as commencing at the Golden Gate.

As another instance, Colonel Wilson is endeavouring to prove that there is a tower at the south-east angle, and considers it a *conclusive proof* that there is straight joint in east wall from top to bottom, because there was a gush of air into our mine below the cut joint above, from the joint of the stones during an east wind, and not during a west wind; and yet in another place where we find a pavement at several points within a few feet of each other, and nearly at the same level, he considers there is no proof that it was continuous. Having thus proved conclusively that there is a break in east wall from top to bottom, he proceeds to prove that there is also a break in the south wall at the "Great Passage," apparently (p. 56), because I do not mention there was not one. He states that I was unable to examine the wall either above or below the opening, but in this he is mistaken. If he had referred to my plan he would have seen that I show the stones of the sanctuary wall down to the rock, with the remark "detail mislaid"; it is very improbable that if there had been the slightest appearance of a cut joint here, I should have failed to have seen it, and I think it may be stated confidently that no such joint there exists. So far from my having closed this work up precipitately as inferred by Colonel Wilson, I kept it open "until further orders are received from England about it," from 26th October to 28th November, 1867; so that there would have been ample time for Colonel Wilson to have written out special inquiries about a cut joint. On 6th December I commenced another shaft to south-east of Single Gate, and again drove in to the sanctuary wall, reaching it on 16th December, 1867, and examined it for several feet with the object of seeing whether there was any passage under the next arch into the Sanctuary.

In another instance, Colonel Wilson pointedly calls attention to the apparent discrepancies between the measurements of Lieutenant Conder and Mr. Schick in their respective plans, and descriptions of the rock-cut passage leading from the Souterrains of the Sisters of Zion to the Noble Sanctuary, and in speaking of the height of this passage states, "Captain Warren gives the height as 30 feet "Recovery," p. 199, and as 36 feet

above the sewage, p. 201. Lieutenant Conder as 20 feet. *Quarterly Statement P.E. Fund*, 1873, *p.* 92." I have followed Mr. Schick's section, which gives 40 feet.

Now it is to be observed, that the roof of this passage falls about 28 feet in its length, that there is a difference of about 5 to 6 feet in the line of the rocky bottom (*vide* Mr. Schick's plan), and that there was (when I was there), a difference of level of 6 feet in the sewage west and east. Thus taking Mr. Schick's plan alone and with no fixed points for the measurements, all the various heights mentioned may be obtained, or indeed any height from 32 feet to 8 feet, so that thus far there need not necessarily be any discrepancy, as we have no record of the exact position where each measurement was made. Lieutenant Conder has already explained the matter so far as he is concerned, and with regard to my measurements they not only accord with themselves, but very closely with Mr. Schick, when read aright.

My visit to this duct was when it was full (up to a certain height), of liquid sewage, and I had to balance myself on a floating door; on entering, I mention that I found myself in a rock-cut passage "30 feet high." I then describe the roof sloping downwards, and state that I came across a dam and descended on to a lower line of sewage 6 feet, and thence traversed the passage to a distance of 200 feet, and then in general language state that the roof of the passage is full 36 feet above the sewage, referring to the lower line, (30 feet plus 6 feet fall). These observations I made merely with the eye, as we had no means of reaching up such a height.

I now examine Mr. Schick's plan, and I find that the height he gives at the entrance (which he notes as "supposed height" (!) and also only appears to have estimated with the eye), where I measured it, from the upper sewage to the roof is 32 feet, and that in no place is it more, so that I cannot account for Colonel Wilson's mistake about 40 feet, unless he measured from some point after the ditch was cleared out; in which case he should not compare my estimate of 30 feet with that of 40 feet of Mr. Schick, taken from a lower line. I expressly state in my section that the line of upper sewage was 2,422 feet. Our measurements are as follows :—

	Warren.	Schick.	Wilson's revised plan.
Top of passage, highest point	2,452	2,454	2,456
Level of upper sewage ..	2,422	2,422	2,422
Level of lower sewage ..	2,416	2,417	?
Presumed lie of rock ..	?	2,410	2,416

The above analysis will show how Colonel Wilson has fallen into this error; he has altered both the height of passage and level of rock as given in Schick's plan, and making it 40 feet, he has compared it with a totally different measurement of mine. If I am wrong, in supposing that Colonel Wilson has taken the very highest point in the roof, and he has taken any other point, then he must be still further in error than I have shown.

While on the subject of discrepancies, I note that Colonel Wilson has forgotten that there was a very considerable discrepancy between his measurement of the Souterrain of the Sisters of Zion and my own, so much so, that I found it necessary to alter the eastern end about 5 feet farther to the north, making the prolongation fall upon the Sakhrah instead of on the edge of the dome of the rock.

This alteration appears to have been adopted by Colonel Wilson, as it is shown in the altered direction on the Revised Ordnance Survey Plates, but I see no mention of it in these notes.

P. 10. Colonel Wilson proposes that the set-off of 1 foot 3 inches from the face of the wall under Robinson's Arch was probably formed by allowing the course to run up perpendicularly from the rock, and suggests that this has escaped my notice. This, however, is a misconception, and I scarcely concur in Colonel Wilson's suggestion, which I note he has embodied in my section of the wall. I think this set-off affected only the one course under the spring of the arch, just as there is a similar set-off under the balcony arch, at the south-east angle, and that the alteration of my section may not be correct: however, this is a matter which could be settled in half-an-hour at Jerusalem.

P. 11. It appears to me that Colonel Wilson is aiming at very close coincidences which may not exist on the ground, in suggesting that the width of Robinson's Arch was exactly the same (viz. 42 feet) as that of Wilson's Arch. The pier of Wilson's Arch is different in every respect from that of Robinson's Arch, and there is no reason for supposing them to be of one age, merely from their appearance. I gave the space as a "trifle" over 41 feet 6 inches, because I could not get a thorough measurement and did not wish to give inches if I was not sure of them, but it is to be noted that a measurement of Colonel Wilson's supports my view: he gives 54 feet from the sanctuary wall to west side of pier. I found the pier 12 feet 2 inches, which would leave 41 feet 10 inches, agreeing with my 41 feet 6 inches and a trifle.

I do not think, however, that Colonel Wilson's measurement at that depth is likely to be correct to an inch, and he does not say whether he measured from the actual Haram wall or from the set-off of 1 foot 3 inches under the arch; in the former case there would be a discrepancy between our two measurements of over a foot.

P. 11. Colonel Wilson argues that as the pavement under Robinson's Arch was only seen in a few places, there is no proof positive that this pavement was connected between these points, and in this I must agree. On the other hand, however, at page 51, he states that because during an east wind a gush of air was felt through a joint of the stones at south-east angle it *is conclusive evidence* that there is a cut joint all the way up, so as to form the tower he proposes. While I will allow that there is a probability of the existence of a cut joint, yet I submit that if there must be a judgment of "not proven" with regard to the first case there must be a similar judgment regarding the second.

P. 12. The remark "no search appears to have been made for other

voussoirs" is scarcely correct, and I do not know on what authority it is made ; it would, I think, lead a general reader to suppose that the work was performed in a somewhat perfunctory manner.

P. 12. Note ‡. Colonel Wilson states that I have made no mention of man-holes leading up to pavement in the text, though I have shown them on the plan. It is to be regretted that he should have written this note, as in Letter XXXVI he will find it stated, with regard to this aqueduct, "every few feet we meet with shafts for lowering buckets." He has quoted these letters on several occasions to point out apparent discrepancies, but on this occasion he appears to have omitted to look at the text before he wrote this foot-note.

P. 13. *Deductions from Discoveries.* He considers that the source from which water was brought to aqueduct is unknown. I have little doubt myself that it was the Hamamesh Shefa, which I believe in former days was either the Dragon well or fountain of Zion (Akra) to the west of the Temple Mount.

Colonel Wilson in suggesting that this aqueduct is the conduit of Hezekiah, makes Zion identical with Moriah, a proposal which appears to be untenable.

He affirms that the existing Haram wall was built by Herod ; this is not consistent with his other proposals, pages 14 and 17, in which he gives different dates for the construction of various portions of the wall.

P. 15. He alludes to certain discrepancies between the rock levels in the "Recovery of Jerusalem" and the lithographs ; the latter were published without being examined by me, and may possibly be wrong in some respects in consequence. I am now examining these points.*

P. 16. He appears to find fault with the excavations, for throwing no light upon his proposed roadway and broad flight of steps ; but it is difficult for an excavator to throw light upon what does not appear to exist.

P. 17. *Wailing place.* He proposes that the stones are not *in situ*, and that it is a reconstruction out of old materials. As he considers the wall of Sanctuary to be Herodian, then these stones must be pre-Herodian, perhaps of the time of the Jewish kings. At page 65 he attributes similar stones at south-east angle to the time of Justinian.

Pp. 19, 20. He suggests that the original wall of Solomon's Temple is in rear of the Prophets' Gate, and enters into a discussion as to the flights of steps that lead up to it. In order to facilitate this proposal he shows the rock (in plate 6), running up precipitously to east, but there are no

* I find, for example, that in letter XVII (22nd November, 1867), I stated that Lieutenant Anderson and I differed only a quarter of a minute (15 seconds of arc) in latitude of Ain Shems, while in printed report the numerator is left out of the fraction, and I am made to say that we differ 4 minutes. [The lithographs were issued as they arrived from Jerusalem to illustrate Colonel Warren's letters. Many of them were only diagrams showing progress which naturally differed from week to week.—Ed.]

apparent grounds for this disposition of the rock, and I think that a jury of 12 surveyors would, with our present knowledge, decide that the rock lies more nearly at the angle I have given it.

P. 22. *Wilson's Arch.* He appears to have fallen into a very singular error regarding the voussoirs of Wilson's Arch. He states that the stones are of *equal thickness*, causing an almost painful appearance of regularity, and then proceeds to prove that they must be ascribed to same date as Haram wall, which he pronounces to be Herodian.

Now both Lieutenant Conder and I, independently, believe that these stones are not of equal thickness. My elevation of the arch certainly shows them of various thicknesses, and we both, on the spot, considered the arch as Byzantine on account of the form and graduated thickness of the voussoirs. It is singular that Colonel Wilson omits to notice this discrepancy, for he refers to my mention of the different forms of the voussoirs.

P. 26. *Vaults west of Wilson's Arch.* I think Colonel Wilson goes rather too far in suggesting inaccuracy in my plans merely because they do not coincide with his plan of the street above. In the first place the plan of the street may be in error ; in the second place, there is no absolute reason why the street should be exactly over the secret passage. I have written to Jerusalem to endeavour to have the street examined. Mr. Schick, writing on 28 April, 1880, sends a revised plan of this street and states "it is at once clear that my drawing differs greatly from that of Colonel Wilson."

P. 29. *Possible nature of Causeway.* The deductions of Colonel Wilson appear to hinge upon a hypothetical wooden bridge, for which he produces no authority. I shall shortly be able to publish some account of these vaults, which will throw much light upon the matter.

P. 30. Gate. Colonel Wilson proposes to call this gate by my name, because he discovered it, on the same principle that Tobler's discovery was called Wilson's Arch. I would deprecate the naming of the ancient buildings in this manner.

P. 31. *Hamam esh Shefa.* He states that the lie of the rock is here very puzzling, but has omitted to mention a discrepancy between his measurement and mine of 30 feet. I state (December 12, 1867) that the rock is 50 feet below the level of Haram Area, while Major Wilson makes it 80, and I make the bottom of the conduit 2,359 feet, while Colonel Wilson makes it 2,339-feet. I went down this well for an examination of the bottom and merely calculated the height from some observation I happened to have taken when engaged in these operations, so that I may possibly be wrong ; but if I am right then the difficulties vanish. It would not take half-an-hour for an agent at Jerusalem to settle this point so far as the level of the bottom of the conduit is concerned.

P. 44. Colonel Wilson informs us that the Haram Wall from the "Castle of Antonia," to the Golden Gate has certain characteristics not found in any other section of the wall, but omits to suggest any epoch to which this very imposing piece of masonry may be referred. This is much

to be regretted, as it appears to introduce a still further complication in his proposals.

P. 58. *Triple Gate.* It is mentioned that the openings of the Triple Gate are only 13 feet wide, while those of the Double Gate, Barclay's Gate, are from 18 to 19 feet, but no notice is taken of the fact that the Triple Gate leads to a double tunnel very similar to that to which the Double Gate leads, and that the one is about 41 feet wide while the other is about 39 feet wide, and that the old wall in each double tunnel terminates at a distance of about 190 feet from the south wall, and that in each case there is a ramp up towards the surface of the Haram Area; and further, no notice is taken of the west wall of the double tunnel of the Triple Gate which Mr. Fergusson asserts was the east wall of the Temple Court. It is to be regretted that so important an omission should have taken place, p. 52. It is to be remarked that no notice is taken of the abutment of the Ophil wall on the south-east angle, beyond the mere mention of the fact; it seems a pity that no reference should have been made to this wall in the deductions.

P. 60. *Shaft near south-west Angle. No.* 13. Colonel Wilson states that in my early letters this shaft is *always* said to be 40 feet from the south-west angle, and the same distance is given on a drawing dated October 2nd, 1867, but that in subsequent drawings and in the "Recovery of Jerusalem" this distance is given as 90 feet.

It is difficult to comprehend the precise object in calling attention to an error made in October, 1867, which has been corrected in every subsequent drawing and description.

A similar effect would be gained were I in describing the revised plans of the Ordnance Survey of Jerusalem to call attention to all the errors that have been corrected in the new edition.

In this particular instance Colonel Wilson has overstated the case.

This shaft was commenced 16th September, 1867, under cover of the cactus bushes which conceal the south-west angle, and, on account of the animosity or greed of the Abu-Saud family, we were unable to cut through the cactus bushes and measure the distance until the work was completed: therefore a blank was left in the account of the number of feet the shaft was distant from the angle. Colonel Wilson says that I *always* called this shaft 40 feet from south-west angle, but I cannot find that I have done so in a single instance. On 22nd September and 2nd October I say it is *about* 40 feet from south-west angle. On 11th October, 1867, I say *near* south-west angle. On 22nd October *at* south-west angle. It was closed on the 26th October. As soon as the measurement was taken, the correct distance was laid down and the plans drawn. The drawing referred to by Colonel Wilson was merely a section through some of the courses of stones and had nothing to do with the site of the shaft.

Space has not allowed me to analyse these notes very fully, neither is it necessary to do so, as I am now engaged on a description of the whole of the excavations for the P.E. Fund, the publication of which, owing to want of funds, could not be previously undertaken.

THE TOMB OF DAVID, ZION, AND JOSEPHUS.

By Prof. W. F. Birch.

An ancient tomb near the Holy Sepulchre is mentioned by Lieutenant Conder, in his "Handbook to the Bible," as being possibly and perhaps really the Tomb of David. This site—the tenth proposed—I consider impossible, being beyond the limits of Zion.

In the tomb referred to there are nine *kokim* or sepulchral recesses, and Lieutenant Conder makes the number of persons buried in the tomb of David to be exactly nine. My calculation is different, as I fail to see why Asa and Ahaziah, if not also the good high-priest, Jehoiada, should undeservedly be thrust out of *the* royal catacomb. (Handbook, p. 341.)

So strong is the Biblical evidence in favour of the City of David having been on Ophel (so called) that it must elude all opposition.

Lieutenant Conder still thinks that this hill was made outside the Jerusalem of David's time, and yet (Handbook, p. 341) he has to admit that the sepulchres of David were apparently situated on Ophel above Siloah (Nehemiah iii, 16). He does not attempt to explain a second difficulty, viz.: how the company after leaving the fountain gate by the stairs of the City of David on their way to the water gate, could *naturally* pass *above* the house of David, if it were either in the Upper City, or near the Holy Sepulchre.

If David neither lived nor was buried on Ophel, *i.e.*, if it was not the City of David, it is certainly a curiosity of literature that in Nehemiah both the *house* and *tomb* of David (or the tomb *twice*, if house = tomb) should be placed there. Which are we to believe, the ancient Nehemiah, or the modern theory that rejects Nehemiah?

Further it seems to me that it is rather rash in 2 Chronicles xxxii, 30, to state that "Marabah al" means "westwards to," instead of "to the west side of" (A.V.) since the same expression cannot possibly have the former meaning in xxxiii, 14.

Some writers, led (or rather *misled*) by the inventive Josephus, identify the City of David with various portions of Jerusalem, viz., the part near the Holy Sepulchre (Lieutenant Conder), that north of the Temple, or with the Upper City. Let the powerful advocates of these positions bring forth their *strong* reasons; it will not be difficult to overthrow them, unless they are decidedly *stronger* than the unsupported statements and random guesses of the Jewish historian, who (as Prideaux says) "frequently varies from scripture, history, and common sense," and (it may be added) as distinct from the three, also from himself. When he is short of information, Josephus often draws a bow at a venture, as long as Jonathan's was sure. Hence the "cock-and-bull" (story) of the levelling of the Acra. How he must have chuckled over thus duping the Gentiles! The idea is rich of sleepy orientals *working*, not as Nehemiah just induced the Jews to do, from "the rising of the morning till the stars appeared" for fifty-two days but *day and night* (!) without any intermission (!!) for three whole years (!!!). Why not have turned this superhuman effort to making the Acra impreg-

nable? "The tale cuts its throat with its own absurdity." (Quarterly Statement, 1878, pp. 183, 186.)

Whiston thinks (Note Ant. XIII, vii, 1), that the copy of 1 Macc. used by Josephus ended at xiii, 50, *i.e.*, with the capture of the Acra. This would afford an opportunity for the incredible story.

When, however, Josephus speaks of his own times he deserves attention. It is fair to add that he is occasionally *mistranslated.* He does not say that Acra was *like a crescent*, since ἀμφίκυρτος (Wars V, iv, I) describes the shape of the moon, when it is more than a semicircle and less than a circle. Some inconvenient statements of his in regard to Acra are also ignored when it is placed north of the Upper City. This position has not *a deep valley on the outside.* Acra, quite as much as the Upper City, was defended where necessary by *three* walls. North of the Upper City it could only have *two.* Josephus often *directly* gives the title of Acra to the Ophel hill (so called), but never to the part north of the Upper City. Nor is it given by implication. Lewin's *four points* are all fallacies, *e.g.* (1) "The part north of the upper city did not belong to it, nor yet to Begetha, therefore it belonged to Acra." In truth it belonged to none of the three, being called *the suburb.* The rest are too complicated to be noticed here.

Josephus often lies open to rebuke, now *altering* (not omitting) what he does not understand, now (to spare his brains) blindly copying the errors of the LXX.

Here are some of his paraphrastic freaks :—

BIBLE.	JOSEPHUS.
(1) "David went *down* to the hold*" (near) the cave of Adullam. 2 Sam. v, 17.	"David went *up* to the citadel of Jerusalem." Ant. VII, xii, 4.

He afterwards compensates for this by turning "went *up*," 1 Macc. vii, 33, into "going *down*," Ant. XII, x, 5.

(2) "David took the stronghold of Zion, the same is the city of David." 2 Sam. v, 7.	"David called it (Jerusalem) by his own name, the City of David." Ant. VII, iii, 2.
"David dwelt in the fort and called it the city of David." *Id.*, 9.	The *upper hill* (afterwards *city*) was by David called the *citadel* or φρούριον (meaning fort or *metzad*). "Wars," V, iv, 1. *See* "Handbook." 336.

N.B.—In the historical passages of the Bible the stronghold of Zion, and Zion (2 Chron. v, 2), are *identically the same* place, while Josephus

* Metsoodah (Hebr.) in both cases. This word seems to be used exactly six times in the historical books, and in every case, I believe, refers to (or to a place near) the cave of Adullam) ; twice certainly (2 Sam. xxiii, 14 ; 1 Chron. xi, 16) ; twice probably (1 Sam. xxiv, 22 ; 2 Sam. v, 17) ; twice quite possibly (1 Sam. xxii, 4, 5) ; since *the land of Judah* may be used in contrast to the *wilderness* of Judah. See also xxiii, 3 "in *Judah*" opposed to "*Keilah.*"

makes the former to be *part* of the latter, really knowing nothing about either.

Both in the Bible are here said to be *the City of David*, and in 1 Macc. i, 21, 33, 35, the City of David is clearly distinguished from Jerusalem. Who is Josephus that we are to sacrifice the precision of these two authorities to his careless statements? As a matter of fact, according to the Bible, David did not call any part of the Jebusite possessions "the citadel," the name he gave was "*the City of David.*" The Bible most carefully avoids describing the *upper hill* as *the City of David*, as when Nehemiah (ii, 13) going from the valley gate to the dung views the walls of *Jerusalem*, and no mention is made of *the City of David* until the Tyropœin is reached (iii, 15).

It has been stated that "the City of David" is used in the Bible both in a narrower and wider sense; it remains for the statement to be proved. It seems to me to be *precisely the same place throughout.*

(3) "David and his men gat them up unto the *hold**" (Metzoodah (near) the cave of Adullam). 1 Sam. xxiv, 22.	"David went up to the *Straits of Mastheroth*" (εἰς τὴν Μασθηρῶν ἀνέβη στενήν). Ant. VI, xiii, 4.

Here he thoughtlessly copies from the LXX, εἰς τὴν [Μεσαρὰ] στενήν where στενήν is a marginal explanation which in time has got into the text. This copying is the clue to his *too easily* credited account of Jerusalem (Ant. VII, iii, 2), a stupid paraphrase from the LXX.

"David built round about from Millo and inward." 2 Sam. v, 9.	"David made buildings about the *lower city;* he also joined the *citadel* (τὴν ἄκραν) to it, and made it one body. Jos. Ant. VII, iii, 1, 2.
ᾠκοδόμησεν αὐτὴν πόλιν κύκλῳ ἀπὸ τῆς ἄκρας, καὶ τὸν οἶκον αὐτοῦ. *Id.*, LXX.	

Josephus also says Joab took the citadel (τὴν ἄκραν). Observe that Millo (Hebr.) becomes in LXX Acra, which word Josephus here adopts, naming it elsewhere as φρούριον = Upper City. Therefore Millo, if we are to believe Josephus, was the Upper City. Who will allow this? "Credat Judæus."

Thus the question of Jerusalem topography is really narrowed to *this important issue.* Which are we to believe, the Bible or Josephus? Let the earth speak.

Zion *excavated* will prove to be "the faithful city" by declaring the truth. The discovery of the Tomb of David will set this matter at rest.

The *tomb* near the Virgin's fountain is (I believe) after all *modern*, and so does not affect the position of the Tomb of David, the entrance of which

* See Note, p. 168.

from other indications I place at *less than* 40 *yards* distant from the corner of the city wall, south of the Haram Area.

I hope in the next number to show full reason for this on a plan. Omitted accidentally in *Quarterly Statement*, 1879, p. 175.

GATH.

Of the five Philistine cities, four are well known,—Ekron (Akir), Ashdod (Esdûd), Askelon (Askalân) and Gaza (Ghŭzzeh). Gath alone is missing, having apparently slipped out of notice before the time of Josiah, not being mentioned in Jeremiah xxv, 20; Zephaniah ii, 4-7.

Where then stood this famous city, often contested for (1 Chronicles xviii, 1; 2 Kings xii, 17; 2 Chronicles xxvi, 6), and rich in reminiscences of David's eventful life? For here in the home of the loyal Ittai he twice took refuge with Achish; here the braggart Goliath grew up to being "six cubits and a span;" here the abusive Shimei stumbled over the fugitive slaves.

Dr. Porter identifies Gath with Tell es Sâfi, a white chalk cliff guarding the mouth of the Valley of Elah. This theory is at first sight very attractive, yet here the old error which formerly placed Zoar on the *mountains*, appears to recur, as there is no reason for supposing that Gath was not in the *plain*, like the other cities of the Philistines. Their strength lay in chariots of iron (Judges i, 19). The "Shining Hill," however is apparently open to attack from the interior over ground ill-adapted for their use, and the list of cities in 2 Chronicles xi, 5-10, admits of the missing city having been situated as far from the hills as was Lachish. If some indications point to Gath having been towards the north of Philistia, they are at once neutralised by the fact that Ziklag, one of its towns, was in the south (1 Samuel xxvii, 6; xxx, 14). We must, therefore, scour the whole open country for the object of our search.

On sheet XX of the large map, a "Wâdy el Ghûeit" is marked, about 10 miles west-north-west of Beit Jibrîn.

This probably implies that there *has been a place of that name*. Mr. Finn recovered the name *Ghutt*, as that of a deserted place near Beit Jibrîn, but states that *Gath* in Arabic would most probably be *Jett* or *Jatt*. If *Ghueit*, however, could represent Gath, we seem to have a clue worth following.

Near the Wâdy is a Crusading tower now known as Kŭl'at el Fenish, Castle of the Philistines ("Tent Work" ii, 163), adjoining the village Keratîya.

Uncertain as is the precise value of these two points, there is another reason for this being the neighbourhood of Gath. Micah (i, 10, 11) says, "Declare ye it not at Gath, weep ye not all; in the *house of Aphrah* roll

thyself in the dust. Pass ye away, thou inhabitant of *Saphir*." It is a remarkable coincidence that near the same Wâdy, not 2 miles from Keratîya, is the village *Beit* (= *house*) *'Affeh*, and another 2 or 3 miles farther down called *es Sûâfîr*.

The resemblance of these names to those above must be more than accidental.

Saphir has already been identified with *es Sûafîr*, and if we take Beit 'Affeh to represent " the House of Aphrah," Gath must have been near.

The Onomasticon of doubtful credit, mentions a Gath between Jamnia and Antipatris, and one 5 miles from Eleutheropolis (Beit Jibrin) on the way to Diospolis (Lydda), but Jerome (in Micah i, 10), states that Gath was on the borders of Judah, on the way from Eleutheropolis to Gaza. This exactly suits a position at (or near) Keratîya close to the track from Beit Jebrîn to El-Mejdel (near Ascalân), and the Antonine Itinerary, and the Pentinger Table give the stages thus : Eleutheropolis—Askalon —Gaza.

About two miles east of *es Sûâfîr* there is marked on the map *a low eminence* (248 feet above the sea) called Khirbet *Jeledîyeh*, close to which are *ruins* and *cisterns*. As Bethany has become el Aziriyeh in memory of Lazarus, so the ruins of Gath may, owing to her famous champion, have been named Khirbet Jeledîyeh, *if* this word as well as Jâlûd would be the Arabic form of Goliath. With Gath removed from Tell es Sâfi, the identification of the latter with Libnah (" Sinai," p. 258) seems to me irresistible.

W. F. B.

EASTERN PALESTINE.

The recent publications of the Palestine Exploration Fund Plans of Western Palestine, have enabled me to check the correctness of my reconnaissance of the Jordan Valley East, Gilead, and Moab, with the most gratifying results.

Starting with the peak of Kurn Surtabeh,* as a point of reference for latitude and longitude, I find that my position of Jericho is exactly correct for latitude, and differs only 4 seconds of arc for longitude (equal to ·03 inch on the scale of ½-inch to the mile). The island on the northern extremity of the Dead Sea is also exact for latitude and 18 seconds too far west in longitude, or about ·15 inch on same scale.

My sketch of the Jordan lies over that on the published plans, crossing

* Kurn Surtabeh.	Latitude.	Error.	Longitude.	Error.
Trig. Survey....	32 5 48....	—	35 27 22....	—
Warren	32 5 25....	−0 13....	35 27 50....	+0 28
Anderson	32 5 33....	−0 15....	35 29 03....	+1 41

and recrossing, and is nowhere more than 30 seconds of arc apart, except in one spot, where I have shown a loop of 1 minute to east. Whereas the Jordan as surveyed by Lieutenant Lynch, varies in distance from 1 minute to 6 minutes of arc to east of Jordan on Palestine Exploration Fund plan. I should state that I did not sketch the minor twists of the Jordan themselves, but accepted those of Lieutenant Lynch, only altering the general positions from 1 to 5 miles to west.

I find that in carrying the work on from Jaffa to Kurn Surtabeh, I have an error of 30 seconds of arc in about 43 minutes of arc, but at Jerusalem I had an error of only 11 seconds in 30 minutes.

Taking 10 seconds as the limit of error in these astronomical calculations, I would propose from these and other data, that my mean error in carrying the longitude eastward from Jaffa is 15 seconds in 30 minutes of arc, or 1 in 120.

Now, my most easterly point is near 'Amman, about 1°15′ east of Jaffa, and I should suppose therefore that my utmost error there would amount to 37½ seconds of arc plus 10 seconds limit of error.

Having arrived at this conclusion, I can apply a constant correction for each observation for longitude, and thus hope nearly to eliminate this error and obtain both the latitude and longitude of the principal points east of the Jordan in Gilead and Moab, to within a limit of 20 seconds of arc, or 600 yards on the earth surface.

Twenty seconds of arc of longitude in this latitude measures about one-fifth of an inch, roughly speaking, on plan.

In this reconnaissance I surveyed about 1,400 square miles in 28 days, including special surveys of Aman, Jerash, Nebo, and other ruins, besides examining sites and arranging for taking about 50 photographs.

At this rate 15,000 square miles could be surveyed in 12 months, on a scale half-inch to the mile, with a prospect of the limit of error not exceeding one-fifth of an inch on plan, from one end of the survey to the other.

I have to suggest that this is the system which should be adopted for the south country below Beer sheba from Gaza to Rhinocolura, round to Petra.

It would cost about £3,000.

I was the first to advocate a detailed trigonometrical survey for Palestine proper, on account of the mass of biblical sites so close together, but in the south country such detailed accuracy is not requisite; a detailed survey would be out of place, it would occupy about 10 years, and cost about £25,000.

CHARLES WARREN.

NOTES ON DISPUTED POINTS.

The Calves of Bethel.—Mr. Birch's paper on this subject has caused me to reconsider the views on the question put forward in the Quarterly State-

ment 1878, p. 28. There is no doubt that the Crusaders thought that the Calves erected at Dan and Bethel stood on the ridges of Ebal and Gerizim, and there is no doubt that the site of Luz or Bethel was shown by the Samaritans on Gerizim from a very early period ; for it is mentioned by Eusebius and other writers of the fourth century. The removal of Bethel to Gerizim is very probably as old as the time of Sanballat, when the Samaritan Temple was built, but a careful study of the various Biblical passages seems to show that no trace of the heretical Bethel can be certainly discovered in the Old Testament.

Moriah.—The dispute as to whether the Jewish or the Samaritan site of Moriah is the true one is very ancient. It must be remembered that in Chronicles Moriah is identified with the Temple Hill (2 Chronicles iii, 1); on the other hand that hill is not visible from off the road from Beersheba until within a distance of half-a-mile, because the ridge of *Abu Thor* is 100 feet higher than the Temple Hill. As to the distance, Beersheba may be easily reached from Jerusalem in two days, while Gerizim is visible *afar off* from the Maritime plain within about 50 miles of Beersheba. From the experience of the Survey marches I am able to say that a Syrian ass can march 20 miles in a day for several days, as we always had donkeys with us on our longest journeys.

Rock Rimmon.—I still feel unable to accept Mr. Birch's proposed site for the Rock Rimmon as connected with the cave Mughâret el Jai. The Biblical account is not sufficiently detailed to allow of much being based on it and Josephus gives nothing further to assist us ; but in addition to objections previously stated I would urge that the cave in question is only *a mile and a half*-from Gibeah of Benjamin, and it seems highly improbable that the remnant of the defeated Benjamites would have been able to find refuge so close to the scene of the battle. The Rock of Rummôn is 5 miles from Jeba' and separated by most difficult country.

If the word *Sela* mean "high" as Gesenius renders it, then Rummôn suits well, being on a most conspicuous hill (300 feet above Jeba'), but if it should be applied simply to precipices—as Mr. Birch urges with considerable force—then the site is again appropriate, standing as it does above the precipices of the rugged *Wâdy el 'Asâs*. The word *Rummôn* is not Arabic, but evidently the Hebrew Rimmon which—it may be noted in passing—probably means "lofty," in allusion to the site of the village, and has nothing to do with a pomegranate (Arabic *Rammân*).

Adullam.—I presume that as Mr. Birch has given his adhesion to the traditional site of this cave he will be able to furnish some argument in support of its claims. I am not aware at present that there is any sound reason for identifying the Cave of Adullam with the present *Mughâret Khŭreitân*. The theory first appears in William of Tyre's works, no reason being assigned. The modern name is derived from the proximity of a ruined monastery of Saint Chariton. The name *Mughâret M'asa*, also applied to the same caves, would signify in Arabic "the intricate cave" which applies very well to the innumerable

passages and halls surveyed by the R.E.s in 1874. The explanation "cave of refuge" seems open to objection, and the word *Meis*, which Mr. Birch connects with Masa, is the name of a well known tree.

Mr. Birch identifies the "hold" (1 Samuel xxii, 5, 1 Chronicles xi, 16) with the Cave, but the word is *Metzed* "a mountain Castle") applied to the "Stronghold of Sion" (2 Samuel v, 7, &c.,) which was not a cave. Josephus says that the Cave was at the City of Adullam (Ant. vi, 12, 3) and there seems no reason to suppose that David's band of 400 men lived in the cave with him. They may properly, it seems to me, be considered to have garrisoned the "hold" or fortress, that is the City of Adullam on its strong hill, close to or even within which was the cave described in "Tent Work" (vol. ii, p. 159).

As to the position of the *City* of Adullam there is I think no dispute. The situation of 'Aid el Ma corresponds exactly with the Adullam of the Onomasticon, and the name is radically preserved. The position agrees also with the accepted identifications of Socoh Jarmuth, Zoreah and Eshtaol and other places mentioned in the Adullam group (Josh. xv. 35). It is also noticeable that David is spoken of whilst in the hold of Adullam as not being in the territory of Judah (1 Sam. xxii, 5). This agrees with the position of Adullam in the Shephelah beyond the mountains to which Judah was confined when the Philistines were too powerful for the Jews.

Naarath.—Mr. Birch quotes a paper (Quarterly Statement 1877, p. 44) by Mr. Kerr as proving Naarath to have been on the north boundary of Ephraim. He seems, however, scarcely to have followed the meaning of the writer. Mr. Kerr points out nearly the same position for Naarath which I had previously advocated, and uses the same arguments. The accepted identifications of Janohah and Taanath Shiloh preclude the possibility of placing Naarath much farther north than the site proposed in the "Handbook to the Bible" and the aqueduct still existing, with the distance given for Nearah from Jericho by Eusebius, seem to afford strong indications in favour of the identification with Khurbet el Auja which I proposed some years since.

24th April, '80. C. R. C.

HIRAM, KING OF TYRE.

(From the "Athenæum," April 17, 1880. By permission of the Proprietors).

Some years ago M. E. Renan, in one of his lectures at the Collège de France, that have contributed so much to the progress of Semitic epigraphy, exhibited and explained before his audience a copy of a Phœnician inscription originated in Cyprus. The copy—imperfect and fragmentary, made, it appears, by an inhabitant of Cyprus whose name is unknown—had been found, if I remember rightly, among the papers left by a German scholar,

who died in the East (M. Sigismund, I think), into whose hands it had come in some indirect way. For its transmission M. E. Renan was indebted to the attention of M. J. Euting, the renowned Phœnician scholar. Unfortunately it had not been possible to obtain information respecting the form, the finding, or the ultimate destiny of the original inscription. It was not known even where it had been found, or in whose possession. All that was known was that its characters had been engraved in bronze.

M. E. Renan, noticing the extremely archaic aspect of the characters, nearly similar to those on the Moabite Stone and to the oldest of Greek inscriptions, did not hesitate to say that the text was of great palæographical importance. The copy, as arranged in five lines, might thus be given in square Hebrew characters :—

(1) נלבעללבנ
(2) ללבננאדני
(3) [? ר]דשתעבדחר
(4) דני
(5) סבנקרתח

In deciphering the characters there was no great difficulty. Several words were easily recognised :—בעל (Baal), אדני (his or my lord), עבדחר (apparently a proper name, Abdhor, signifying servant of Horus), and סבן (inhabitant). In line 5 קרתח seemed a mutilated word, to be completed as [קרתח]דשת (Carthage or the "new city"). I even proposed to connect line 5 with line 3, and—taking as *daleth* the first letter of line 3, also uniting the end of line 5 with the first three letters of line 3—to read in full the name קרת־חדשת. True, this new arrangement was opposed to the indicated disposition of the lines; but I suspected that their order as given in the copy did not truly represent the order of the original inscription. This idea also led me then to compare together the lines 1 and 2, and to suppose they might originally contain the same dedicatory sentence; לבעל לבנן אדני ("to his lord Baal-Lebanon"). In this Baal-Lebanon I proposed to recognise a divinity of a new kind, the Baal of Lebanon, *i.e.*, the mountain Lebanon itself adored as a god; for we find the mountains Carmel, Hermon, &c., treated as gods, and Sanchuniathon (edit. Orelli, p. 16), whose names as Phœnician gods, Casius, Libanos, and Antilibanos, gives an account of their mythological filiation. This conjecture of mine might well at that time seem adventurous—the more so as it would transfer us rather unexpectedly from Cyprus to Syria—but it has been, as will be seen, fully verified by the sequel.

In 1876—thanks to an obliging indication given by General Palma di Cesnola—I was made acquainted with the name of the possessor of this inscription, M. Laniti, a merchant at Limasol. My further success in the acquisition of a monument of which the scientific value had already been sufficiently shown was largely due to the interposition of a dear and now regretted friend—one whose early decease is a serious loss for archæology

—M. Georges Colonna-Ceccaldi. His influence in Cyprus won for me the opportunity of purchasing the inscription. M. E. Renan and M. Waddington, the latter then Minister of Public Instruction, kindly consented to aid our negotiation, and to defray the expense required to secure for the Bibliothèque Nationale, the monument of which we were in quest—say, rather, monuments; for, in fact, we obtained not one inscription alone, as we expected to, but a group of texts engraved upon eight fragments of different bronzes, which at first view seemed to be the *débris* of cups, pateræ, or tripods.

In January, 1877, M. E. Renan, in the Collège de France, resumed his scrutiny of these texts with collation of their originals, and rather later he made the Académie des Inscriptions a memorable communication, followed by a memoir, which appeared, with an illustrative plate, in the "Journal des Savants," in August of the same year (*see* "Journ. des Sav.," p. 487).

Of the texts now examined five fragments corresponded with five lines of copy already noticed, and served to define certain characters doubtful or wanting in the copy, viz., in lines 2, 4, 5 :—

(2) עללבננאדני
(4) אדני
(5) [ו]סכנקרתח

But, moreover, there are now three fragments containing three epigraphs, wanting in the copy already noticed :—

(6) טבסכנקרתחדשת
(7) [?]ן]מלכצדנמאזית
(8) בראשתנחשת

The two conjectures above-mentioned were materially confirmed by these new elements. The name of the city, קרת־חדשת—let it mean strictly Carthage proper, or any "new city" of like name—was here seen engraved in full on one fragment, and the existence of a Syrian god named בעל לבנן (Baal-Lebanon) was now made clear. The mention of a "king of the Sidonians"—מלך צדנם—in line 7 added new interest to these fragments; but unfortunately the name of this king was wanting. One might notice a trace of a letter just visible after the *mem*, and so guess that the required name ended perhaps with a *nun*. On the fragment 8 the word נחשת (brass, brazen) detached itself perspicuously from the word, or vestige of a word, preceding and very obscure.

At a first glance the eight fragments of bronzes—bent, twisted, cut, flattened, and variously oxidized—would suggest the notion that they belonged to as many distinct monuments. But four of them obviously were connected, as two and two, by their inscriptions, viz., the fragments 5 and 3 (as I supposed at first), and again, those known by the numbers 1 and 4 thus :—

(5) + (3) [ו]סכנקרתח + דשתעבדחר
(1) + (4) נלבעללבנן[ן] + אדני

Moreover, the fragments marked 7 and 8, though showing no material signs of contact with each other and making no sequence, seemed by their likeness of engraving to have been parts of one and the same inscription. The two fragments numbered 2 and 6 seemed isolated. On the whole, the fair conclusion seemed to be this: that the eight fragments might well be disposed in five groups belonging to five distinct objects, whether pateræ or tripods.

It has been my study to make a careful examination of these antiquities, in order to give a graphic representation of them in the "Corpus Inscriptionum Semiticarum," published by the Académie des Inscriptions, and last year I had the opportunity of pursuing my researches with sufficient leisure. My examination of the remains has been minute and prolonged, and has led me to unhoped conclusions respecting the right arrangement of the fragments, and the true interpretation of their seemingly incoherent inscriptions. After many experiments, of which details may here be spared, I have established, with almost complete certainty, this fact: that all the fragments are parts of one and the same vase of bronze, which was purposely broken into pieces in some time far remote. I have connected as parts of a whole seven of the fragments, and this has been done by making due allowance for such accidents as twisting, bending, flattening, and cutting. One fragment still refuses to be brought in contact with the rest; however, as I believe, even this odd fragment belongs to another part of the same vase. By my reconstruction of the original form I obtain, instead of a series of phrases or broken words without sequence, one inscription, or a large part of one inscription, having a consistent general tenour and a character entirely novel. Many obscurities vanish when the parts are rightly put together, and a grand historical light is shed over the whole inscription by the appearance of an historical name recorded in the Old Testament. Thus I put together these fragments. In the plan of reading here shown, * marks a junction of lines that is quite certain, ** marks a junction extremely probable. At the top I put and set apart the fragment still isolated, which gives I think, the aim or address of the inscription, but is insulated from the series by a lacuna of which the extent is not readily guessed. I divide the words here, and restore in brackets some letters obviously implied.

(A) [לב]על לבני אדני

. . . . . .

(B) [ו]סכן קרת ח
**

(C) דשת עבד חר
*

(D) [ם] מלך צדנם אז ית
**

(E) ן לבעל לבנ
**

(F) ן אדני
**

† Cf. סנן; and perhaps there was some reference to the mysterious cherub, סוכך, at Tyre, to which Ezekiel alludes in xxviii, 14, 16.

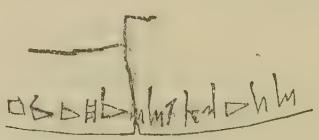
(G) בראשת נחשת ח?
(H) טב סכי קרתחדשת [א]
.....

The inscription ran on in one line all around the lip or margin of a bronze vase, having a large circular opening, and was engraved on the exterior convex surface. The fragment H still shows some part of the original curvature. With this aid I have calculated that the opening of the vase was a circle with a diameter obviously equal to a Babylonian foot, or say 0·315 mètre. In its general shape the vase was a section of a sphere, and the wall of the part most bulging was very thin. The thickness of metal was increased towards the opening, and here its strength was aided by a sort of swelling border. The vase, showing signs of being wrought under the hammer, was apparently the work of a coppersmith. The inscription—a dedication of the vase itself to Baal-Lebanon—may now be read in one continuous line by following the order already shown by the letters A,...B, C, D, E, F, G, H :—

[לב]על לבנן אדני ... וסכן קרתחדשת עבד חר[ם]
מלך צדנם אז יתן לבעל לבנן אדני בראשת נחשת
ח?טב סכן קרתחדשת א.....

That is to say, "To Baal-Lebanon, his lord,.....[mention of a vow, name, and rank of the author].....(? and) soken of Qarthadachat, servant of Hiram, King of the Sidonians; has given it [or "he has given it"] to Baal-Lebanon, his lord, in excellent brass [or "in heave-offering of brass"] —H.....tob, soken of Qarthadachat ["who"? or "that"? "it"?—....."

The point to which I would especially invite attention is the appearance here of the name of HIRAM, described as "King of the Sidonians." The final *mem*, which I have put in brackets, may be accepted for a restoration *quasi*-certain. Its stem is visible at the end of the line C, and the zig-zag is seen at the beginning of the line D. A blow from the edge-tool used in ancient time for cutting up the vase has hit exactly the middle of the *mem*, and pressed out the metal towards the right and the left. The material junction of the two fragments cut away by the tool, though less perfect than the proofs of junction left on other fragments by breaking, is still as satisfactory as may be.



Here is a fac-simile of this capital passage, including the words—

עבד חרם מלך צדנם

"Servant of Hiram, King of the Sidonians."

The word *soken* seems, at a first glance, well translated by "inhabitant";

yet it may be asked, might not this word refer to a function, as in Isaiah xxii, 15? or be applied to a personage who, in the name of King Hiram, governed Qarthadachat? The name of this personage would probably be followed by his patronymic, ending perhaps in *vau*. Or if the *vau* is here a conjunction, it should be preceded by some word designating another quality or function. The word here lost would be contained in the lacuna above noticed. The whole turn of expression would correspond exactly with such a title as we find in 2 Kings xxv, 8 :—

נבוזראדן רב־טבחים עבד מלך בבל

i.e., "Nebouzaraddan, chief of the *tabbâkhim*, servant of the King of Babel."

The exact interpretation of this inscription, mutilated at the beginning and at the end, gives rise to many queries of detail, which cannot be noticed in this *précis*, but will be treated in the critical memoir which I am preparing respecting the monument: for example, the exact division of phrases, the grammatical character of the demonstrative אז, the construction of ירתן ב, the real sense of בראשת, the difficulty of knowing if there are here named two distinct *sokens* of Qarthadachat—one having made the vow, the other having executed the vase—and other queries that may possibly arise. But here I must limit myself, and add but a few words respecting these famous names, Hiram, Carthage, and Lebanon, as revealed to us in this inestimable inscription. "Hiram, King of the Sidonians"! This at a first glance is surprising; for we know of no Hiram save the King of Tyre. But here "King of the Sidonians" (not "King of Sidon") can mean only King of the Phœnicians. Of this we are assured by a reference to the remarks of Gesenius ("Scripturæ... Monumenta," pp. 263-4). The facts there noticed had already been well observed by Des Vignoles ("Chronologie de l'Hist. Sainte," p. 25), and we might refer also to the judicious observations of M. de Vogüé ("Mém. de l'Acad. des Inscriptions," Sav. Étr., VI, i, 64). According to Homer, Sidonian = Phœnician; Ethbaal, in the Bible, is King of the Sidonians, and is described by Fl. Josephus as King of the Tyrians and Sidonians. Solomon, referring to Hiram's subjects, calls them Sidonians (1 Kings v, 20), when speaking of their going to cut down timber on that mountain Lebanon to which our monument ascribes a sacred character. Apparently Hiram is called King of Tyre in the Bible, because his residence was Tyre. Still, his official title might be King of the Sidonians, or Phœnicians. But is the Hiram of our vase identical with Hiram the contemporary of David and Solomon? The characters of the inscription are very archaic; the palæography would not peremptorily contradict such a supposed date. But it should be noticed that several Phœnician kings might have this name Hiram. (There was also, we know, a Hiram the architect.) Under the dynasty of one house the same name might be transmitted to several kings, from grandfather to grandson, as Semitic peoples were fond of onomastic atavism. Assyrian documents show a Hiram, King of Tyre, paying tribute (*c.* 742) to Tiglathpileser II (and at that time there is

no question of Sidon : these documents are interesting as showing intermittent occultations of certain large cities in Syria). A third Hiram, King of Tyre, flourished in the time of Cyrus (Menander ap. Fl. Josephus c. Ap. i, 21*a*).

Another question arises respecting the city Qarthadachat. Is the city identical with Carthage proper, or did the name belong to some other "new city"? The name occurs often, in various times and among various peoples. M. Renan has pertinently noticed the Syrian habit of denoting old cities by such names as Palæ-Tyrus, Palæ-Byblos, &c., to distinguish them from new cities. Even in Phœnicia itself might there not be a Carthage, or "new city"? M. Renan might even be tempted to find in Qarthadachat a synonym of Tyre itself, set in contrast with Sidon ; one might think also of Sidon named in contrast with Tyre, or refer to the Sidonian colonization of Aradus (*c.* 760). Several colonies (in Cyprus, for example) might have been also called Qarthadachat. After all, it is not impossible we may be led to regard our inscription as one made a little subsequent to the foundation of the Tyrian Carthage, and this would bring us near that Hiram who lived in the former half of the eighth century B.C.

Where on Lebanon was the sanctuary of Baal-Lebanon, for which this bronze vase was destined ? I leave the inquiry for further research, while I would suggest that the place was not far from the sea. The fragments were found in Cyprus, and at first sight it seems strange to find there an inscription clearly belonging, in the first instance, to the coast of Syria. But it should be remembered there were long disputes and wars carried on between Cyprus and Phœnicia. In the expedition of Apriès, for instance, his squadron ravaged the Phœnician coast, seized Sidon, and stayed there long enough to pack and carry off their plunder. In a similar raid invaders, coming in galleys from Cyprus, might have pillaged the sanctuary of Baal-Lebanon, and carried away to Cyprus its precious things, which would probably be partly vessels of bronze. For convenience of lading it was apparently a general habit to break up, bend, and pack such vessels, which were chiefly valued as pieces of metal that might be recast to other uses. This habit is expressly referred to in the Bible. The passage—relating especially to the sack of Jerusalem by Chaldeans—has not been, perhaps, sufficiently considered hitherto. "The Chaldeans," we read, "broke [שברו] the columns of brass, the *mekonot* and the sea of brass which were in the temple of Jehovah, and they carried away the brass to Babylon" (2 Kings xxv, 13).

Our vase, we conclude, was thus seized, and so broken in pieces. Then the fragments were twisted or bent to suit them for stowing away, with other spoils, in the hold of a galley. Brought to Cyprus, they were cast in a heap with other metals destined to be melted down for various uses ; but the *débris* of our vase luckily escaped their projected conversion. During many centuries they remained buried in the ground, and this was their state when they were covered with their second patine, very distinct from the former, the vase being already oxidized before its cutting and breaking up. Or possibly the previous consecration of the vase suggested it might

well be reserved *in statu quo*, as booty to be offered to the gods worshipped by the captors. Mesa, we remember, makes a boast of the fact that he threw down before the face of Chamos vases taken from the sanctuary of Jehovah at Nebo. It would, therefore, be important to know exactly the spot in Cyprus whence these fragments came, as there may be a chance of finding there more of the sort: this hint, I hope, will not escape the attention of English antiquaries residing at Cyprus.

My own observations may, perhaps, serve to confirm the truth of the remark of M. Renan about the palæographical rank of these fragments, "which may claim the second place, immediately after the Moabite Stone," and to show that their historical is not under their palæographical value.

C. Clermont-Ganneau.

A FIND OF COINS IN JERUSALEM.

By Dr. Ad. Ernan.

(From the *Zeitschrift* of the German Palestine Association).

On the 5th of April, 1872, an earthenware lamp containing 41 gold coins and a pot 118 silver pieces, were found in the ground belonging to the German Johannites in Jerusalem.

Most of the coins date from the fourth century of the Hejira and the latest of these particular years is 325 Hej. A.D. 936-7. This leads in all probability to the year of grace 937, having been the time when the coins were hidden. Putting aside a few coins that are indecipherable, the others date from :—

The	5	years	320–5	of the	Hej.	G.	16	S. 14,	thus in the decade 60
„	10	„	310–20	„	„	4	„	38	„ „ 42
„	10	„	300–10	„	„	1	„	14	„ „ 15
„	20	„	280–300	„	„	1	„	27	„ „ 13,5
„	50	„	230–80	„	„	4	„	3	„ „ 1,4
„	30	„	200–30	„	„	6	„	3	„ „ 2
„	50	„	150–200	„	„	9	„	9	„ „ 3,6

It is apparent from this that the oldest coins were not the most uncommon.

Many of the coins in this find were of course struck in Syro-Palestine, and hardly any such have been discovered in the northern finds. Next comes Filistia (Palestine) by which Jerusalem is undoubtedly meant. One silver piece of 320, and several gold pieces of 320, 323, 325 are extremely rare; silver coins issued by this place were long unknown, Tabariyeh (Tiberias) possessed a gold and silver coinage, both of which were issued in 320 Hej.; only one of these latter coins has as yet been discovered.

Damascus ceased to be an important mint under the Caliphate of the descendants of Abbas; thus there was but one dirhem belonging to that place in our find. Two silver pieces issued at Homs (one of them in 323)

are of special interest, as before that its copper coinage only was known. There is one coin that was struck at Antakiyeh (Antioch), and all such are very rare.

A new country, ancient Cilicia, has been brought within the domain of Muhammedan Numismatics by a gold piece of 313, and two silver coins (one of which dates from 312) all of which were struck at Tarsus.

Egyptian money always had a large circulation in Palestine. This find therefore contains gold pieces of the years 317, 314, 311, 277, 264, 238, and silver pieces of 323, 324, 319, 313, 312, 308, 295, 289, 285 (?) and 220—many of which are historically interesting as the coinage of the Toulunide princes. There is also a dinar of the Aglabite Ziyadat-Allah of the year 214.

Northern Mesopotamia is represented by the following silver pieces: Harran 323, er-Rahaba 282, er-Rafika 299, Mausul 31, Nisibin 302 and 323.

The money of 'Irak-'Araby had a large circulation throughout all parts of the kingdom; hence many specimens of it are to be seen in our find. Nearly one-fourth of the dirhems belong to Baghdad, and were struck in the years 324, 318 (?) 317, 316, 312, 311, 308, 305, 300, 295, 294, 291, 286, 282, 279, 193, 192, 191, 170, 160, 157.

There is a gold piece of the year 231, and there are also some silver coins of 317, 308, 291, 284, all issued at Samarra; some of Kufa belonging to the years 309, 303, 297 and 288; some of Wasit belonging to the years 309, 305 and 283, and some of Basra struck in 3, 289 and 286.

There are two dirhems of 'Irak-'Adjemy which were coined in Ispahan in 293 and 291; 3 of Khuzistan coined at Ahwaz in 3, 297 and 293; 1 dirhem of Farsistan coined at Istathr in 322; 1 of Shîrâz (?) in 304, and 1 of Fars in 242.

One silver coin comes from the farthest east of the Mussulman Empire, having been struck at Kirman in 311.

Very few of these coins belong to the north-east Muhammedan lands; two silver pieces of Esh-Shash (296 and 3) and one of Samarkand are all that the Jerusalem find contains. It is difficult to decide whether a dinar that was struck in the year 253 belongs to Merv in Khorassan.

Seven coins come from the Caucasus. Five dirhems (of the years 312, 311 and 294) belong to Tiflis, one silver coin of 315 to Arminyah, one dinar of 311 to Azarbaijan. The two last were struck by Yusuf ibn Dâoud of the Sajide dynasty and are of extreme rarity.

THE RUINS OF ASCALON.

By Herr Guthe (Leipzig).

(From the *Zeitschrift* of the German Palestine Association.)

Next to the ruins of Cæsarea, those of Ascalon are the most important on the coast of Syria; although they lie at a considerable distance from the usual route they have very justly attracted the attention of various

travellers in Palestine, both in ancient and modern times. There are, therefore, many descriptions of them in existence. A short time ago, Herr C. Shick, architect in Jerusalem, sent me a plan of the city and the country around. The publication of the plan is of the greater value because the ruins are being rapidly buried in sand. In a few more generations all that remains of the city will be hidden under the drifting sand, and its position will be no longer known.

The first sight of the walls surrounding the city proves the correctness of the statement made by William of Tyre, the celebrated historian of the Crusades, that Ascalon was built in the shape of a semi-circle, the diameter of which ran parallel with the sea, while the circular part swept out into the land in an easterly direction. The same author goes on to relate that the walls were strengthened by numerous towers built on artificial ramparts ("*aggeribus manufactis*"). This statement is not quite correct, because it is an indisputable fact that the city was bounded on the west by cliffs from 30 to 70 feet in height rising perpendicularly out of the sea and only broken in one or two places, as for example where a stream fell into the sea. Guérin, who visited the place in 1854 and 1863, is of opinion that these rocks were made even more precipitous by the human hand than they were by nature, or that this natural defence was protected and supported by upright blocks of masonry which have now fallen to pieces. Much the same thing must have been the case with regard to the fortifications that form the west or diameter of the half-circle. Nothing regarding this question can be decided by means of the state of the eastern and south-eastern portions of the walls, for these parts of the fortifications are completely buried in the sand drifted over them by the action of the south wind. On the north-eastern side alone, it is possible to make out the lie of the ground with any certainty, as it is more protected from the encroachment of the sand. Tobler, who, in 1857, approached the ruins from the northern or Jaffa side, became convinced by his investigation of the remains of the fortifications, that they "rest on a not very high (*see* more exact statement above) range of apparently rocky hills, which rises like one hill towards the south." Thus it is evident that the walls of the old city of Ascalon were built on a semi-circular range of rocky hills which ended in perpendicular cliffs of various heights on the sea-shore. Wherever nature had failed to make the defence afforded by this natural rampart complete, the weak places were strengthened by the help of earthworks or masonry. These rocks rose out of the sea and the surrounding valleys like a natural fortress. Their highest point was towards the east; and in the west, where the ground fell away, they formed a glacis.

The western wall, the "string of the bow," follows the line of rocks exactly, and is therefore indented with little bays. It is about 1,200 feet long; at its opposite ends, *i.e.*, at the south-west and north-west corners of the town, there are extensive ruins of fortifications that were undoubtedly intended for the protection of the coast. The "sea-gate" or "*porta maris*" mentioned by William of Tyre is nearly in the middle of the western

wall. The ground reaches its lowest point near the south-western corner. At this place a little bay stretches into the city; it somewhat resembles a moderate sized basin. In spite of the drifting sand, the ground here is even now but little higher than the level of the sea. This bay, in old times, was most assuredly a dock or harbour within the walls, the fortifications on either side of it were particularly strong. A great number of solid columns of grey granite were laid like beams across the thickness of the fortifications; when the walls fell into ruins, many of them tumbled upon the beach, where they now lie and are washed by the waves of the sea; the rest are buried under the *débris* of the masonry. This use of the columns is not only to be seen near the harbour, but also in other parts of the fortifications of Ascalon. Guérin says that those built in columns seemed from a distance like loopholes with the muzzles of the cannon peeping out. Of course the columns originally belonged to the grand halls and temples of ancient Ascalon. The Saracens first, and then the Crusaders, used the pillars and stones of the old buildings for the defence of the city without a thought about their historical or artistic value; a state of affairs that Guérin remarked had also obtained at Cæsarea. From this we perceive that the ruins of the walls of Ascalon which now exist are the remains of the fortifications built by the Saracens and Crusaders.

Those portions of the town wall against which the drifting sand from the south has beaten, are nearly covered by it on the outside. On the southern and south-eastern sides, the sand has penetrated the city by means of breaches in the walls, and every day it covers the old fortifications more and more, both within and without. The ancient towers alone rise distinctly like rocky islands out of the sea of sand. They are particularly close together in this place. The road to Gaza leaves the city on the south by a gate which used to be called in the time of William of Tyre, the Gate of Gaza. This road is still recognisable, although thickly covered with sand.

On the eastern side we come to the highest and strongest part of the fortifications. The sand has not drifted so much there, thus the original form of the ruin is more easily recognisable than elsewhere. Schick has marked this spot on his plan as the "old citadel." Beside it was the gate opening on the road to Jerusalem. William of Tyre describes it as follows:—

"The first gate looks to the east, and is called the Great Gate. It also bears the name of the Jerusalem Gate, because it opens on the way leading to the Holy City. There are two high towers, one on either side of it, which command and defend the city below. In front of it are three or four small gates in the out-works leading to the Great Gate by means of winding paths." Guérin saw traces of this in the ruins. Schick says nothing about it.

Plantations of trees border the ruins on the north. The fourth gate, or Jaffa Gate, used to be in this place. The ruins are lying in such wild confusion that one is inclined to suppose that they were thrown down by

an earthquake. Guérin estimates the walls as being 2 m. thick, and about 10 m. high. The outer parts of the wall were built of stone, and the inside of it was filled up with small stones and mortar. It is rather difficult to make one's way round the walls, and it takes fully an hour to do it. One's progress is much impeded by the heaps of ruins and by the sand.

The interior of the town is quite different from what one expects to see. There are no heaps of ruins, and almost everywhere blooming vegetation. The roads, which are probably the same as the old streets, are bordered by low walls of loosely built stones. The ground falls away in different places within the city ; and the plan shows the beds of four old watercourses. Thus the fortifications overtopped and protected the houses almost all round. The lowest part of the city is the south-west corner in which the before-mentioned little harbour is to be found. Between this and the street leading to the sea-gate is the highest part of the ground to the west. The cliff is crowned by the remains of a Mussulman wely. The ruins are hidden behind hedges, and the low walls before described. Guérin examined them in a cursory manner. He discovered the ruins of three churches, the remains of a theatre, several vaults, and a great number of tanks and wells. Schick had so little time to spare that he was only able to examine and introduce one of these last into his plan. It lies in the north-western corner of the city. It is hewn in the rock, is round and deep. Its water level is the same as that of the sea. William of Tyre stated long before that there were no springs either within or without the town, but that there were many draw-wells containing good drinking water. Barclay ("City of the Great King," 1857, p. 577), mentions "many wells of water," on the hills and in the valleys of the city, by which he means the ancient wells and not springs.

The valleys that surround Ascalon on the land side are half covered with sand on the east and south-east of the city. There are beautiful orchards in those on the north and north-east. Opposite the "old citadel" are the first trees ; they are old caroobs and sycamores. They form the boundary between the sand and the gardens. A Mussulman wely is under their shade, which, according to Abulgeda, once belonged to a great Mosque. Travellers usually pitch their tents there ; as for instance, Lady Hester Stanhope in 1815, when she employed from 100 to 150 men in digging on the south side of the old Mosque, in hopes of finding a treasure, but all in vain. To the north, the gardens stretch out as far as the village El-jora ("The Hole," out of which the plain to the north-east of Ascalon runs). Egyptian Mussulman families live in the mud huts of this village, and support themselves on the products of the gardens within and without the old walls of Ascalon. Besides vegetables, there are fig, orange, olive, pomegranate and citron trees, almond trees, apricots, and palms. The onions that grow wild in the sand around Ascalon, are celebrated for their delicate flavour. The Romans gave them the name of Ascalonia, hence scalogno (Italian), échalotte (French), schalotte (German), shallot (English). The roads between the gardens are all bordered with low walls.

The strip of sand at the foot of the western wall is covered at high tide when the waves beat against the cliffs. There is no secure landing-place or anchorage for ships on the coast of Ascalon. It is sandy, shallow, and not sufficiently protected from the east wind by the city. The little basin within the town scarcely deserves the name of a harbour. Still J. G. Kinnear (Cairo, Petrea, and Damascus. London, 1841, p. 212), found some remains of a mole. This discovery is confirmed by Schick, when he writes: "Looking down from the rocks we could perceive shallows, shaped something like a half-moon. Perhaps the walls of a harbour may once have rested on them, although we could not discover any such wall." The regular form of these crescent-shaped shallows is an apparent proof that they were made by human agency. It is true that there is no precise mention of any harbour in the immediate vicinity of Ascalon. The sea-port of Ascalon mentioned by the Patriarch John of Jerusalem in a synodical letter, in the sixteenth century, under the name of Majumas Ascalonis, does not come into consideration here, for it cannot have been situated between the town and the sea; it must have lain at some distance to the north or south of the city, especially as the letter before alluded to mentions the Bishop of Majumas Ascalonis as well as the Bishop of Ascalon. Nevertheless Guérin has vainly sought for this sea port. But William of Tyre's description of the siege of Ascalon by Baldwin III in 1153, goes to support the assumption that the city then possessed a sort of sheltered roadstead. While Baldwin beleaguered Ascalon on the land side, Gerhard of Eidon with a small fleet cut off all ingress and egress by sea. When a large Egyptian fleet suddenly appeared in the offing, Gerhard at first sailed to meet it and dispute its *landing*, but soon took to flight for fear of being overpowered by numbers. And then the enemy's fleet, in which were some ships of "marvellous and monstrous size," was able to approach the city unopposed, and bring succour to the besieged. From this it is probable that Ascalon then possessed a landing-place suitable for large ships. The shallows described by Schick were probably connected with the buildings erected for this purpose. The existence of a real harbour is not to be thought of, for William of Tyre distinctly states that Ascalon had none. Guérin (Judée II, p. 138 f.), mentions two moles, to which, however, he gives a different position to that described by Schick.

To the history of Ascalon given by Guérin in the same work, p. 153 ff., I add the first mention of it in Egyptian history. The great campaigns in Asia, under the kings of the eighteenth dynasty, reached this city. The conquest of Ascalon by Rameses II (of the nineteenth dynasty), is especially praised on the Egyptian monuments. It is inscribed on the stone walls of the Temple of Karnak, and is given by Lepsius in his Denkmäler III, 145 C. According to this description, Askelna ('Askalna), the wretched town his majesty took when it rebelled against him," lies upon a height. Pharaoh's soldiers climbed the walls by means of ladders, and beat in the gates with clubs. The defenders of the city are represented with the dress and features of the Canaanites, and differ entirely from the Philistines of

the Egyptian monuments. This almost leads to the conclusion that the Philistines had not yet taken possession of the land, and that it was still inhabited by its original Canaanite owners.

PROGRESS IN PALESTINE.

In a letter in the Austrian "Zeitschrift für den Orient," Herr C. Schick, Government Surveyor of Buildings in Jerusalem, gives some interesting facts to show the progress which has been made in Palestine during the last 25 years. This is especially evident in the erection of many new buildings. In the small villages very few new houses are to be seen, while, on the other hand, great extensions have been made in the larger places, especially in towns—a sure sign of centralization. This is especially the case with the Christian population. In Jerusalem, inside the town, neglected or ruined houses have been restored or rebuilt by private persons or companies; outside the old town are entirely new suburbs, the extension being made especially towards the west. The Jews have formed among themselves building societies, which have erected long barrack-like buildings adapted for several families. It may be estimated that the number of dwellings during the last 25 years has been more than doubled, probably trebled. This is especially the case with Bethlehem, which conveys the impression of a newly-built town. In Jaffa the town wall has been demolished, the ditch filled up, and a number of large new houses and magazines, even palatial buildings, been erected. So also in the gardens of Jaffa, many new houses have been erected, and to the south and north of the town complete Arabic suburbs, mostly by settlers from Egypt. In Ramleh, also, new houses are seen, still more in Kaifa, which Herr Schick hardly recognised again on his last visit. In the neighbourhood of this town is the new German colony at the foot of Mount Carmel. Nazareth gives quite the same impression; the place has increased in size, and looks as if it had been rebuilt. Tiberias also has its new houses, in Jenin a new military arsenal has been erected, as also in Nablus, along with a fine new barrack. In the latter place the once lonely valley towards the east has assumed quite a homely aspect, and in the town are many new private buildings and also a new khan. there are also the new school, the Roman monastery, and the buildings of the Protestant mission. In Bethlehem a new barrack and arsenal have been erected. New houses are also to be seen in Jifne, Ramallah, Beit-Jal, Beit-Sahur, and other places. Through the schools and the increasing trade the working people have acquired greater style and taste, and the newer houses are thus mostly a great improvement on the old—not the oldest, which, as a rule are well built. Nearly all the houses have now glass windows, a rare thing 20 years ago. As a sign of the advance in agriculture, it may be mentioned that in Jaffa the gardens have increased in extent fourfold during a quarter of a century. Besides the German colony referred to,

new settlements are to be seen on the Aujeh river, in the plains near Bir Addes, and Kefr Saba, as also many new gardens, especially in Hable. New plantations are seen here and there ; the country people are investing their capital abundantly in cattle-rearing. At Kolonieh several new houses have been built, and the gardens there are noteworthy ; as also in Artos. In the vicinity and in the region around Jerusalem, the land has nearly all been taken up, trees have been planted, and cisterns dug. So also the aqueduct, which brought the spring water in the olden time from the so-called Pools of Solomon to Jerusalem, has been again erected ; so that again it discharges at the place of the Temple. A very notable advance is seen in the lighting of the streets of the towns and the arrangements for keeping them clean ; in the latter respect, however, there is still much to be desired. No longer are the gates of towns shut at sundown, to the obstruction of trade and the imprisonment of the inhabitants within the walls. There has also been a great advance in the paving of the towns ; in Bethlehem, even in the winter time, the streets are quite passable, which was far from being the case formerly. In Jerusalem, the tanneries and the slaughter-houses have been removed outside the town. On several buildings clocks have been placed which strike the hours for the public benefit. Herr Schick notices as a great advance the increasing toleration between the different religionists during the past 25 years ; Jews, Mussulmans, and Christians, as a rule, live in harmony, and a non-Mussulman seldom suffers in any respect on account of his creed. Even the red fez is not obligatory on non-Mussulman Government servants. European clothing is now common both with men and women, and many of the latter may be seen dressed in the latest Paris fashions. The pashas no longer move about in constant state, but may often be seen on foot in the streets with only one or two attendants. European furniture, chairs, sofas, and tables, are now common. Great bells are now allowed to be tolled in the Christian churches ; old Christian churches have been restored and new ones built in Jerusalem, Nazareth, Tiberias, Tabor, Nablus, Jifne, Ramallah, Beit-Jal, Lydd, &c. So also have a number of synagogues, especially in Jerusalem, been built during these 25 years. All this progress must not be taken as a sign of any laxity in religion on the part of Mahomedans, who have during this time built many new mosques and otherwise shown themselves as much attached to their religion as ever. Justice, also, is much more impartially administered and the old barbarous punishments have been abolished. In Jerusalem the sanitary department is in charge of a German physician, and building affairs are in the hands of a German architect. From these statements, which we believe are perfectly trustworthy, it is evident that great progress has been made in Palestine during the past 25 years. We would hope that this example might prove infectious, and that in the next 25 years a like progress might be seen in the whole of Turkey in Asia.